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ABSTRACT

This survey of 96 Texas public school superintendents and 96 Texas public school business managers determined their decision-making roles and differing perceptions of the facility planning process. Survey data reveal few significant differences between superintendents and business managers suggesting that business managers often perceive correctly to what extent superintendents involve others in decision making entailing school facility acquisition. Superintendents were more often collaborative than autocratic in decision making, particularly, during the "selling" and "occupation" phases of facilities' planning. "Selling" involved justification to the public for the new school and presentations made in the public arena to persuade members of the community of the need for the new school. During the "occupation" phase decisions were made to involve parents and other community members in the opening of the new facility through open houses, etc. Superintendents also tended to be highly collaborative when the time came to develop educational specifications for the new building. Business managers' perceptions for superintendents' decision processes did not significantly differ. Appendices provide study correspondences, the superintendent's job description, and the rankings of superintendents' skills and needs. (Contains 82 references.) (GR)

THE DECISION MAKING ROLES AND PROCESSES OF TEXAS SUPERINTENDENTS IN EDUCATIONAL FACILITY PLANNING

BY

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DISSERTATION

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THE DECISION MAKING ROLES AND PROCESSES OF TEXAS SUPERINTENDENTS IN EDUCATIONAL FACILITY PLANNING

APPROVED BY
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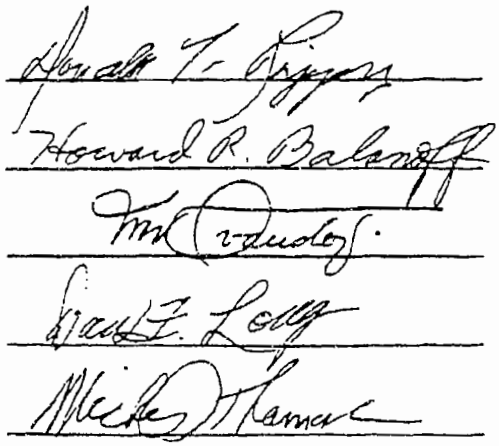

This dissertation is lovingly dedicated to my family whose unfailing love, support, and patience have culminated in the completion of this project: my mother and father who believed and modeled that one should not only accomplish what one is capable of but to reach beyond oneself to achieve a measure of personal and professional excellence; my daughter, Jennifer, and son, Stephen, who were always positive and supportive; and my wife, Juanita, whose unwavering emotional sustenance and inexhaustible patience throughout the project helped bring it to realization.

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THE DECISION MAKING ROLES AND PROCESSES OF TEXAS SUPERINTENDENTS IN EDUCATIONAL FACILITY PLANNING

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Ninety-six (96) Texas public school superintendents and ninety-six (96) Texas public school business managers were surveyed to develop a better understanding of the decision making roles and processes of superintendents and business managers' perceptions of these processes. Using the Vroom-Yetton Normative Model as guide, a scenario was developed that presented five

(5) decision processes, beginning with an autocratic decision type, then, moving along an increasingly collaborative continuum to the point of reaching decisions by consensus. A second scenario presented twenty (20) decisions representing seven (7) phases of school facility acquisition including: a) needs assessment; b) design; c) selling; d) financing; e) construction; f) occupation; and g) evaluation. Superintendents and business managers responded to their respective surveys by indicating which of the five (5) decision processes he/she would use in making a decision relative to the different phases.

Survey data analysis revealed few significant differences between superintendents and business managers suggesting that business managers often perceive correctly to what extent superintendents involve others in decision making entailing school facility acquisition. Superintendents were more often collaborative than autocratic in decision making, particularly, during the "selling" and "occupation" phases of facilities' planning. "Selling" involved justification to the public for the new school and presentations made in the public arena to persuade

members of the community of the need for the new school. During the "occupation" phase decisions were made to involve parents and other members of the community in the opening of the new facility through open houses and the like. Additionally, superintendents tended to be highly collaborative when the time came to develop educational specifications for the new building. Business managers' perceptions for superintendents' decision processes in the above areas did not differ significantly.

Of the superintendents who responded to the survey, the number of schools, K-12, in a given district ranged from four (4) to fifty-four (54) while for business managers the range was three (3) to fifty-six (56).

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INTRODUCTION AND BACKGROUND

School administration can be defined as a social process that involves problem solving and decision making (Halpin, 1958). Stoops, Rafferty and Johnson (1981) state that "administration at the local level mobilizes personnel and resources to provide maximum learning opportunities in harmony with legal stipulations" (p. 7). Personnel, in the above, includes administrative staff, teachers, parents, support staff, and teachers while resources involve finance, facilities, transportation, equipment, and supplies (Stoops et al., 1981).

The chief administrator in the majority of school settings is the superintendent--the chief executive officer (CEO) for the board of education. Campbell, Cunningham, Nystrand & Usdan (1985) found that "he is the most visible, most vulnerable, and potentially most influential member of the organization" (p. 209). Rebore (1985) determined that "the superintendent of schools is the most influential administrator in a

school district because the responsibilities of the position affect the operations of the entire system" (p.73). Because of the increased complexity of school operations in the last decade, the role of the superintendent has moved from that of an overseer of academic activities to include managerial and political functions. Wiles and Bondi (1985) see the superintendent as having two "genetic" roles: "to serve as executive officer for the school district (advising the board and promoting technical changes) and as *the* individual accountable for all school operations" (serving the board, administrators, teachers, parents, students, taxpayers, and citizens-at-large) (p. 105). After reviewing a number of studies examining roles of the superintendent, Guthrie and Reed (1986) determined that the superintendent represents the school administration and the school board to the public, negotiates conflicts, and engages in rational planning. Rational planning is defined by Mintzberg (1973) as a

> ...planning process (that) begins with the study of the values and objectives of top management, the strengths and weaknesses of the organization, and the opportunities and problems facing it. Strategic

plans are then designed to solve the problems facing it (p. 154).

The issues facing the superintendent today, explain Kimbrough and Nunnery (1988), are school financing, planning and goal setting, assessing educational outcomes, accountability/credibility, staff and administrator evaluation, and administrator/board relations. Guthrie and Reed (1986) agree in part: "only one-fifth to one-fourth of the superintendent's time is spent in matters related to instruction or pupil personnel. The overwhelming proportion of time is devoted to budgetary and finance matters, facilities, personnel, and public relations concerns" (p. 58). With respect to educational facilities, the superintendent has responsibilities associated with planning, design, and construction. It "is a complex process," maintains Candoli, Hack, Ray & Stollar (1973), "that requires attention to political, social, fiscal, and technical/professional components" (p. 339). Facilities planning, design, and construction require the concentration of all concerned entities. These include: students; local voters and taxpayers; the superintendent and his staff and school board; the

architect; the central education agency; local municipal agencies; planning groups; manpower groups and other agencies (Candoli et al., 1973).

Concentration with respect to facilities on the part of the superintendent and members of his staff would require utilization of decision making procedures. Schmuck and Runkel (1985) found:

> ...a decision is a directive, a promise, or an agreement asserting that particular people will carry out particular acts. A decision, therefore, is a channel of influence. When an administrator makes a decision that certain people will do something, the administrator is seeking to influence those people. When a group decides that it will do something, the group members are seeking to influence them-selves as a collectivity (p. 234).

When groups make decisions members participate in those decisions. Participation may improve decision quality (Yukl, 1989). Furthermore, Lewis (1987) sees it is as the wave of the future. He states:

> ...it is expected to blossom throughout most organizations in the 21st century. It appears even

> to this day to be a style of management that releases the human potential allowing people to grow in the work environment and to make a significant contribution to the attainment of goals and objectives. It has been found to affect in a positive manner people's attitudes, commitment, quality and productivity (Lewis, 1987, p.39).

Ouchi (1981) found in a study of Japanese companies that their most prominent feature was a participative approach to decision making. Those employees who would be impacted by a decision were to have a part in making it. In what he described as the Theory Z approach to management, Ouchi suggested that "involved workers are the key to productivity" (Ouchi, 1981, p. 4).

The superintendent, as the chief executive of a school district, has varied and vital responsibilities including planning for educational facilities through a decision making process. It is his/her goal to reach optimal decisions for the benefit of students, teachers, and community.

STATEMENT OF PROBLEM

"Superintendents, as chief executives of schools, are faced with significant pressures from within and outside their organizations to fundamentally restructure decision making processes, teacher and administrative roles, and (alter) the traditional delivery systems" (Orr, 1990, p. 94).

Numerous studies, texts, and articles describe the role of the superintendent as decision maker (Schmuck & Runkel, 1985), (Davis & Loveless, 1981), (Kowalski, 1983), (Council of Educational Facility Planners, International [CEFPI], 1976), and (Kowalski, 1989). Enhanced decision making in school facility planning is a priority for superintendents. Kowalski (1989) found that some school administrators have come to rely exclusively on consultants, architects, engineers and other specialists for school building planning and construction. However, these administrators soon learn that the retainment of such experts does not diminish accountability and public scrutiny. Kowalski (1989) states:

Regardless of how many specialized personnel are

> employed to assist with a facility project, the superintendent and his or her team are expected to set the tone for planning, establish educational priorities, and protect the interests of the public. This inescapable fact illuminates the need for school administrators to possess the planning skills necessary to direct multi-million dollar projects (p. 6).

Knowing that refinement of the decision making process in educational facility planning is of great consequence over the next decade or two, close examination of how superintendents specifically make decisions is essential.

In light of this challenge, and the importance of executive leadership, it is appropriate to focus on superintendents' decision making procedures. The Vroom-Yetton (1973) Normative Model provides a framework on understanding decision processes. "We are interested," say Vroom and Yetton (1973), "in the way in which leadership is reflected in social processes utilized for decision making, specifically in leaders' choices about how much and in what way to involve their followers in decision making" (p. 5). Evidence suggests, for

example, that in one form of the process--shared decision making--"the CEO empowers others and delegates responsibilities" (Roueche & Baker & Rose, 1989, p. 150). Contrasting forms include directive, negotiative or persuasive, consultative, participative, or delegative (Bass, 1985).

It is the intent of the author to examine school superintendents' decision making processes in educational facilities planning through application of the Vroom-Yetton (1973) Normative Model. These processes will be compared with how superintendents' followers perceive the decision making process. Specifically, the study will examine how a school business manager describes the decision making process utilized by his CEO. As a result, evidence will be available which will suggest what decision making practices a superintendent utilizes in planning for school facilities and how his business manager perceives these practices.

DEFINITION OF TERMS

In the following section definitions are provided for specific terms relevant to the understanding of this study:

NORMATIVE MODEL FOR DECISION MAKING Vroom and Yetton (1973) view decision making as a cognitive and social process, with social aspects being the most relevant to processes of leadership. How and to what extent leaders choose to involve followers in decision making is of primary concern. Because decision procedures are specified as to which one would be most effective in a given situation, the model is said to be "normative."

HOUSE BILL 72 In mandating a 22 to 1 teacher-student ration in the first through fourth grades, the Texas legislature (as reported in the Texas Education Code) established a need for the construction of new classrooms across the state (Texas Education Agency, 1988).

SENATE BILL 1019 As reported in the Texas Education

Code, Section 16.401, this bill requires the State Board of Education to establish a state-wide inventory of school facilities and to institute standards for the determination of adequacy of school facilities with respect to space, educational adequacy, and the quality of construction (Texas Education Agency, 1989).

CRITICAL INCIDENCE PROCESS This process is used to report behaviors of superintendents in a pilot study as they describe decision making processes relevant to educational facility planning. This process is adapted from the Critical Incident Technique developed by Flanagan (1954).

CIT The Critical Incident Technique consists of a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles (Flanagan, 1954, p. 327).

BEHAVIORAL EVENT INTERVIEW TECHNIQUE (BEIT) This interview procedure facilitates the identification of

behavioral competencies in narrative data (Pena, 1990). BEIT, also referred to as the critical behavior interview, is a variation of Flanagan's (1954) critical incident interview technique. Charles River Consulting (in Daniel, 1990, p.38) calls BEIT, "the next best thing to direct observation: it pushes the person being interviewed to recall in detail what s/he did and said in key situations as if s\he was reliving them. And the interview is better than direct observation in that it allows you to review what the person was thinking about and feeling during the situation itself."

PURPOSE OF STUDY

The purpose of this study is: 1) determine what decision making processes are utilized by public school superintendents in planning for educational facilities and 2) compare these processes with how followers perceive them. The Vroom-Yetton Normative Model will be used to analyze data collected through surveys of public school superintendents and followers. Decision making styles and their effectiveness will be discussed.

RESEARCH QUESTIONS

1. When superintendents make decisions concerning planning of school facilities, to what extent do these decisions follow the Vroom-Yetton (1973) Model?

2. To what extent do business managers verify decisional characteristics employed by superintendents in educational facility planning?

SIGNIFICANCE OF STUDY

This study explores the decision making roles and processes of Texas public school superintendents in educational facility planning as well as the perceptions of these roles and processes by followers. The Vroom-Yetton Normative Model is utilized as the conceptual framework against which decision roles, processes, and perceptions are measured. As a result, this study attempts to advance knowledge about superintendents' decision making behaviors.

Results have potential for providing information on the decision making process of Texas school

superintendents. Roles and processes that positively impact decision making may help improve educational facilities planning.

DELIMITATIONS OF STUDY

This study will investigate decision making roles and processes of Texas public school superintendents in planning for educational facilities. School business managers' perceptions of decision making processes used by their superintendents will be examined. Superintendents and business managers will be drawn from a population of Texas public school officials employed in school districts having 2500 or more student membership.

C H A P T E R T W O

REVIEW OF THE LITERATURE

INTRODUCTION

The purpose of this review is to provide a context for the present study. It will explore the historical background of the public school superintendent as CEO. This will be followed by an investigation of the managerial role of the superintendent to provide a setting for a subsequent discussion of the work of pertinent managerial theorists, including Abraham Maslow, Herbert Simon, Frederick Herzberg, and Henry Mintzberg. Next, the superintendent's role as educational facility planner will be addressed. This section will also address the Vroom-Yetton Normative Model as a theoretical framework for examining the superintendent's decision processes. Next, elements of transformational leadership and the participative management component of Theory Z as they relate to or enhance skills for effective superintending will be discussed. In conclusion, tenets of Critical Incident

and Behavioral Event Interview Techniques will be reviewed.

ROLE OF SUPERINTENDENT AS CHIEF EXECUTIVE OFFICER

Historical Background

To place the role of superintendent as CEO in perspective, the author begins this section with a brief discussion of the historical development of the superintendency.

Schools in America began in the early 1600's and following English and European traditions, were largely under the control of parents and clergy (Kimbrough and Nunnery, 1988). As schools expanded and separated from home and church, what was to become a school administrator began to evolve. "Head teachers," then "principal teachers" with limited managerial responsibilities emerged as early as 1838 (Stoops et al., 1981, p. 6). At this point in time, School Committees governed day-to-day operations of schools. Tyack and Cummings (1977) found that "lay committees often examined penmanship, certified and selected

teachers and decided on the myriad details of running the schools" (p. 51).

Due to rapidly increasing numbers of students, teachers, principal teachers, and schools, School Committees and school boards found that help was needed in managing paper work generated by this expansion. As a result, superintendents were appointed to attend to clerical duties, usually record keeping and report filing (Kimbrough and Nunnery, 1988 & Wiles and Bondi, 1985). In 1812, the first state school superintendent was appointed in New York "to administer the state common school fund" (Brubacher, 1947, p. 576). Other appointments followed in Buffalo and Louisville--1837, then Providence and St. Louis--1839 (Kimbrough and Nunnery, 1988).

By the end of the nineteenth century, the superintendency had evolved into different areas of responsibility. Blumberg (1985) found that in addition to secretarial duties of maintaining accounts and records, some superintendents guided the school board on financial matters while others supervised learning activities and were known as "superintendent(s) of public instruction" (p. 21).

Pioneering superintendents practiced "without specified training, credentialing, or required experience," but growth in societal complexity soon demanded expanded administrative responsibilities (Stoops, et al., 1981, p. 6). Wiles and Bondi (1985) found that early in the twentieth century the superintendent was seen, by and large, as a business manager "responsible for preparing budgets, passing tax levies and board issues, and managing programs" (p. 102).

As schools and school districts grew, four fundamental divisions of the school process emerged for which the superintendent assumed responsibility: 1) instruction; 2) personnel management; 3) finance; and 4) public relations (Stoops et al., 1981). In describing functions of a school organization in a modern era, Clabaugh (1966) listed the areas of CEO accountability as follows: 1) organization; 2) curriculum development; 3) non-professional services; 4) personnel administration; 5) business and finance; 6) building planning; 7) public relations; and 8) in-service education (p. 55). (For an inventory of 33 specific duties of school CEOs, see the Texas

Association of School Boards' (1984) sample job description for superintendent in Appendix C of this study). Griffiths (1966) divided the superintendent's job into four parts: 1) improving educational opportunity; 2) obtaining and developing personnel; 3) maintaining effective relations with the community; and 4) providing and maintaining funds and facilities (pp. 70-71). Summarily, this stage of development of the superintendency may see the superintendent as "a chief executive who is responsible for both the educational program and the business affairs of the district" (Wiles and Bondi, 1985, p. 102).

Davidson (1987) sees the nature of the superintendency today as complex, demanding a shrewd mixture of insight and experience with the CEO moving from a position of power broker to a broker of resources.

In negative format, Davidson (1987) states that the superintendent is:

>>Not a dictator; but a negotiator, a compiler and centralizer;

>>Not a single entity in a vacuum; but a collaborator and believer in participative

management;

>>Not a demander; but a motivator, an enhancer, a person devoted to quality relationships with staff, students, parents and community;

>>Not a person immune from politics; but a coalition-builder and leader, a political strategist, lobbyist with management skills;

>>Not a traditionalist always; but a contemporary realist, futurist and planner; and

>>Not an operator by the seat of his pants, but one who uses technology, statistics and appropriate research designs...(p. 19).

Wiles and Bondi agree in part with Davidson. They determined during the last two decades the superintendent's role has evolved to that of master politician. He/she must help citizens and professionals keep the goals of public education in view. He must strive to build coalitions of support among community members and school professionals to effect tax increases and changes in programs to achieve comprehensive school improvement. For the superintendent, building consensus through adroit and continuous compromise is an essential skill (Wiles and Bondi, 1985).

As may be noted at this point in the literature review, the role of the superintendent as CEO has evolved over the years into one rich in complexity and challenge. To understand more clearly the specific attributes of a superintendent's position as chief executive officer, the review now turns to an analysis of pertinent literature from the field of management.

Management Functions of Superintendent

School board trustees as public servants are empowered by the state constitution, statutes, and central education agency regulations to provide the best possible education for a given district's students. To this end it behooves board members to establish a good working relationship with its chief executive officer, the superintendent of schools. Although board members are responsible by law for the final disposition of decisions affecting personnel matters, taxation, construction programs, and effective education programs, board members, individually or collectively, do not get involved in the daily operation of schools; this is the responsibility of the superintendent and his

administrative team (Pringle, 1989, Candoli et al., 1984, Wiles and Bondi, 1985, & Kinder, 1978). However, ideally, the superintendent and board work together collaboratively and cooperatively over the long term in making decisions that lead to general improvement of a district's schools (Pringle, 1989).

With respect to the roles and responsibilities of the superintendent, prerequisite administrative skills considered by the board for the superintendent may include the broad categories and components of the following:

1. School board relationship
2. Community relations
3. Financial planning
4. Facilities planning
5. Professional staffing and evaluation
6. Auxiliary programs
7. Organization of the central administrative staff

(Pringle, 1989). How these categories and components relate to management in general may be seen in the following section.

Universality in fundamentals of management and other management functions among different organizations has

been suggested in the work of Harbison and Myers and Farmer and Richman (in Pringle, 1989), Koontz and O'Donnell, 1972, and Koontz, O'Donnell, and Weihrich (in Pringle, 1989). The latter present the functions of planning, staffing, leading, and controlling as the essentials of management. When the findings of Koontz, O'Donnell, and Weihrich are viewed comparatively with the general administrative skills necessary for effective superintending, the following corollaries exist:

Leading: Koontz et al.--influencing people so that they will strive willingly and with enthusiasm toward goals. Corresponding superintendent skills may be seen in establishing productive board relationships and the assuming of leadership role in community relations;

Planning: Koontz et al.--selecting from among alternative future courses of action for the organization. The superintendent's skills in the area of planning include facilities development and financial resource planning;

Organizing: Koontz et al.--establishing a formal system of roles that people can perform so that they

may work best together to achieve organizational objectives. Related superintendent skills include organization of central administration staff and coordination of auxiliary services;

Staffing: Koontz et al.--filling positions in the organizational structure by identifying workforce requirements, recruitment, selection, appraisal, compensation, and training of people. Superintendent skills in staffing include professional staffing and evaluation, and central office organizational design;

Controlling: Koontz et al.--closely related to planning where the process involves establishing standards, measuring performance against standards and plans. A superintendent's skills that relate to controlling are financial planning, facilities development, and monitoring auxiliary services and operations (Pringle, 1989, p. 17).

Aspects of the Managerial Theory of Abraham Maslow

Maslow is, perhaps, best known for his theory of

human motivation. This theory, as it relates to management theory in general, encompasses several relevant propositions:

> (1) The integrated wholeness of the organism must be one of the foundation stones of motivation theory.
> (2) Practically all organismic states are to be understood as motivated and as motivating.
> (3) Motivation theory should be human-centered rather than animal-centered.
> (4) Motivation theory is not synonymous with behavior theory. The motivations are only one class of determinants of behavior. While behavior is almost always motivated, it is also almost always biologically, culturally, and situationally determined as well (Shafritz and Hyde, 1992, pp. 129-130).

To help explain human motivation Maslow formulated a hierarchy of needs which contained the following: physiological or hunger needs; safety needs; love or belongingness needs; esteem needs; and self-actualization needs. These were arranged, according to Maslow, in order of prepotency, e.g., one (hunger, for example) must be satisfied before the next (safety)

becomes necessary for the human organism to fulfill. Toward the higher end of the hierarchy, love and esteem needs find their place in management theory from the standpoint of one's relationship to others in his group in the workplace (Shafritz et al., 1992).

To explain the dynamics involved in one's ascent up the needs hierarchy Maslow states:

> If both the physiological and the safety needs are fairly well gratified, then there will emerge the love and affection and belongingness needs, and the whole cycle...will repeat itself with this new center. Now the person will feel keenly, as never before, the absence of friends...He will hunger for affectionate relations with people in general, namely, for a place in his group, and he will strive with great intensity to achieve this goal (Shafritz et al., 1992, pp. 134-135).

As love and belongingness needs are met, Maslow determined that the human organism now moved up the hierarchy to fulfillment of esteem needs. He believed that "all people...have a need or desire for a stable, firmly based...high evaluation of themselves, for self-respect or self esteem (sic), and for the esteem of

others (Shafritz et al., 1992, p. 135). Maslow believed that people had a desire for reputation or prestige, recognition, attention, importance, or appreciation from others.

As a superintendent moves through group decision processes, one may observe the significance of Maslow's theory addressing human motivation and needs.

Aspects of the Managerial Theory of Herbert Simon

According to Simon (1976), decision making in organizations does not happen in isolation. Each organization's members' decisions are interrelated, he says, supported by a rich network of partially formalized communications. This makes decision making an organized system of relations.

In describing group behavior in decision making, Simon likens the process to calling signals in football or bidding in bridge:

> The purpose of signals in football, or bidding in bridge, is to enable each player in a team to form accurate expectations as to what his teammates are

going to do, so that he can determine the proper means for cooperating with them to reach the common aim (Simon, 1976, p. 71).

In planning and organizing for administrative activities, Simon believes that to be successful each participant must have a reasonable expectation of what the other is going to do. Cooperation and coordination is achieved when participants share a common goal and each is informed as to planned behaviors of others.

Simon calls an organization a collection of people and says that what the organization does is done by people. "The activities of a group of people become organized," he says "only to the extent that they permit their decisions and their behaviors to be influenced by their participation in the organization" (Simon, 1976, p. 110). To add additional emphasis to participation in decision making, Simon (1976) elaborates on the process of "composite decision," a term first used by Chester Barnard:

> It should be perfectly apparent that almost no decision made in an organization is the task of a single individual. Even though the final responsibility for taking a particular action rests

with some definite person, we shall always find, in studying the manner in which this decision was reached, that its various components can be traced through the formal and informal channels of communication to many individuals who have participated in forming its premises. When all of these components have been identified, it may appear that the contribution of the individual who made the formal decision was a minor one, indeed (Simon, 1976, p. 221).

In The New Science of Management Decision, Simon (1960) joins Maslow in drawing emphasis to fulfillment of needs, particularly, belongingness and esteem needs in predicting the way organizations and their leaders will look in the future:

> ...there is a more fundamental way in which the organizations of the future will appear to those in them very much like the organizations of today. Man is a problem-solving, skill-using, social animal. Once he has satisfied his hunger, two main kinds of experience are significant to him. One of his deepest needs is to apply his skills, whatever they be, to challenging tasks--to feel the exhilaration

of the well-struck ball or the well-solved problem. The other need is to find meaningful and warm relations with a few other human beings--to love and be loved, to share experience, to respect and be respected, to work in common tasks (p. 50).

Aspects of the Managerial Theory of Frederick Herzberg

In Work and the Nature of Man, the third book in a trilogy addressing job attitudes, Frederick Herzberg (1966) states what he feels to be the primary function of any organization:

> The primary functions of any organization, whether religious, political or industrial, should be to implement the needs for man to enjoy a meaningful existence. For the first time in history we have the opportunity to satisfy man's inherent wants. Yet what value to man if industry manufactures commodities to supply material comfort at the expense of human development and happiness? (p. x).

Hertzberg's Motivation-Hygiene Theory, well-known in the annals management theory, postulates that five

factors stand out "satisfiers" or strong determiners of job satisfaction: achievement, recognition, work itself, responsibility, and advancement. "Dissatisfiers," which were related to a worker's environment, not the job itself, were: company policy and administration, supervision, salary, interpersonal relations and working conditions (Herzberg, 1966).

The worker, Herzberg (1966) believed, had two sets of needs: hygiene needs and motivator needs. When met, hygiene needs (related to environmental factors) can minimally reduce a worker's discontent with a job, but motivator needs, when met, gives the workers a sense of growth and psychological stimulation. Motivator needs are related to tasks which have meaning for the individual.

In The Managerial Choice, Herzberg (1976) discussed four job design methodologies relative to their advantages and disadvantages under Motivation-Hygiene Theory. Orthodox Job Enrichment (OJE), which Herzberg considered to be the most effective, listed as major advantages: 1) lasting individual growth and competence; 2) quickly implemented; and 3) minimizes new hygiene problems. Major disadvantages of OJE

included: 1) older employees adapted to impoverished jobs cannot change; 2) increased employee defensiveness for incompetence; and 3) assumed lack of motivators can become alibis. Another job design methodology was socio-technical systems. Advantages of this methodology were: 1) not limited by technology; 2) more variety of jobs; and 3) more willingness to follow decisions. Disadvantages included: 1) tyranny of group over individual; 2) slowly implemented; and 3) less likelihood of job enrichment. The third job design methodology given was participative management. Advantages listed included: 1) improves hygiene factors; 2) better supervisor/subordinate communication; and 3) more willingness to follow through on decisions. Disadvantages were shown to be: 1) can become human relations manipulation; 2) slowly implemented; and 3) less likelihood of job enrichment. The final job design methodology Herzberg described was industrial democracy. Advantages of this type were: 1) theoretical reduction in organizational conflict; 2) greater congruence of job rights with social and civil rights; and 3) more willingness to follow through on decisions. Disadvantages included: 1) equality of

ignorance (becomes an end in itself reducing likelihood of constructive, innovative change); 2) slowly implemented; and 3) less likelihood of job enrichment.

As may be noted, no one methodology solved the problems associated with job enrichment, an important element of Motivation-Hygiene Theory. However, Herzberg as early as 1959 realized that "jobs must be restructured to increase to the maximum the ability of workers to achieve goals meaningfully related to the doing of the job" (Herzberg, 1959, p. 132). At the same time he reached the conclusion, albeit tentatively, "that the individual should have some measure of control over the way in which the job is done in order to realize a sense of achievement and of personal growth" (Herzberg, 1959, p. 132).

Aspects of the Managerial Theory of Henry Mintzberg

In considering the managerial nature of a superintendent's or chief executive's job, it would be useful to examine the literature in this domain. In The Nature of Managerial Work, Henry Mintzberg

delineates several schools of managerial thought. The most typical is that of the "classical school" which is identified, by and large, by the acronym, POSDCORB. Based on the work of Henri Fayol and Luther Gulick POSDCORB stands for:

1. Planning--outlining objectives and the method(s) for accomplishing them;
2. Organizing--establishing a formal structure with coordinated subdivisions arranged for the purpose of achieving objectives;
3. Staffing--bringing in and training of personnel;
4. Directing--leading the enterprise, making decisions, issuing directives;
5. Coordinating--interrelating and integrating all divisions to accomplish organizational objectives;
6. Reporting--recordkeeping and dissemination of information from records to all levels of the organization; and
7. Budgeting--fiscal planning, accounting, and control (Mintzberg, 1973).

Having first appeared in 1916, POSDCORB still dominates much of managerial thought and theory (Dale, 1973). Upon observing what managers actually do, Mintzberg

points out that POSDCORB does not accurately describe their real activities. Furthermore, patronage of the classical school of thought, in fact, blocks our search for a deeper, more meaningful understanding of a manager's work, says Mintzberg (1973).

The "great man school" analyzes managers in groups, i.e., including families, careers, personalities, social affiliations, or individually. In the case of the former, little attention is given to the manager's work and for the latter, information is typically anecdotal and too sketchy to provide a basis for theory.

The "entrepreneurship school" and "decision theory school" deal with the manager exclusively as decision-maker. As an entrepreneur decision-maker, the manager is aware of the following: 1) a problem; 2) organizational goals; and 3) all courses of action (to achieve goals) and their consequences. He evaluates the consequences, ranks alternatives, and chooses the one that will best accomplish organizational goals (Mintzberg, 1973).

In practicing decision theory, a manager makes what is known as an "unprogrammed" decision. It is unprogrammed because, unlike the entrepreneur, the

manager, here, lives and works in a complex, unpredictable world where he must react to pressures from interest groups and others whose goals may be different from his organization's; he simply hopes to make decisions that avoid conflict, much less maximize objectives of the organization.

The "leader effectiveness school" focuses on the interpersonal behavior between leaders and followers. The leader's management style may be autocratic (task-oriented) or participative (people-oriented) depending upon situational factors, including organizational climate and the leader's skills, personality, and expectations. Mintzberg is critical of this school in that proponents have paid excessive attention to two basic styles--autocratic and participative and less to the dynamics of interpersonal behaviors of leaders (Mintzberg, 1973).

The next major school of thought on a manager's job is entitled the "leader power school." Here, as in the last section, Mintzberg uses the terms leader and manager interchangeably, unlike his discussion of the first two schools. In this school the focus is on the leader's ability to use power to elicit desired

responses from subordinates. To fully understand a leader's responsibilities, one must understand his sources of power and the extent to which he controls his own job.

The "leader behavior school" is largely described by the work of Leonard Sayles who "lived within an organization for a period of time recording whatever seemed of interest" (Mintzberg, 1973. p. 20). No effort was made at conducting a tightly controlled scientific experiment, but Sayles, nevertheless, made a significant contribution to the literature on managerial work. Sayles found that lower and middle-level managers acted as monitors, as leaders, as job participants, and as equalizers, i.e., balancers or stabilizers, of the organization helping it adapt to pressures through introduction of long- or short-term adjustments, to achieve "a dynamic type of stability" (p. 20).

The last school, the "work-activity school," is virtually the opposite of the classical approach. Here, the emphasis is on an inductive method of research on what managers actually do with data recorded and analyzed systematically. What conclusions are drawn are based on empirical or observed evidence. Data are

either recorded in diary form by a manager or through observation and transcribing by an investigator. Mintzberg utilized work-activity observational methods and developed, as a result, "a new description of managerial work content as well as a number of conclusions on work characteristics that reinforce the findings of earlier work-activity studies" (Mintzberg, 1973, p. 25).

Employing the work-activity concept, Mintzberg identified specific activities that managers perform. Based on systematic, empirical evidence, Mintzberg drew the following conclusions about the work of the manager:

1. Manager's jobs are similar regardless of profession. What differences do exist can be explained in terms of common roles and characteristics. This, says Pringle (1989), supports the notion of universality in management.

2. The work of a manager is, to a large extent, challenging and nonprogrammed. There are, however, regular tasks to fulfill, usually in moving information and maintaining a status system within the organization.

3. The manager functions as both a generalist and a specialist: the former, when the focal point is the

general flow of information and the handling of general disturbances; the latter, when he/she must utilize specific roles and skills of a manager.

4. Most of a manager's power stems from his/her access to sources of information that are often not open to others in the organization. This factor enables the manager to make more effective decisions than other employees. However, much of the information is transmitted verbally and this impedes successful dissemination of data to others. Implications for improvement--upon concluding his study of the work activities of managers, Mintzberg (1973) proposes the following:

1) Information means power; sharing information means dissipating power;
2) The manager who hoards information is trading effectiveness for power;
3) The risk of disseminating as much information as possible must be weighed against the significant advantages of having well-informed subordinates who can make effective and compatible decisions (p. 178).

5. A heavy work load and an unrelenting work pace

brings fragmentation, variety, and brevity to a manager's job. Instead of being able to plan reflectively, the manager is caught in what is termed his/her "prime occupational hazard"--superficiality. Much of what occurs, then is a result of manipulation (of verbal information), instincts, and a stimulus-response environment. Implications for improvement--at the conclusion of his study, Mintzberg (1973) submits the following:

1) To overcome the managerial workload, a "management team" may be formed;
2) Information is the key linking element in the the different work that a manager does; therefore, effective job sharing depends on abilities of managers to share information;
3) In successful job sharing, managers are complementary and compatible. They must be able to communicate easily and efficiently, and they must share a vision of the direction in which they wish to take their organization (p. 180).

In determining the amount of variety, brevity, and fragmentation present in a manager's job, Mintzberg (1973) utilized the work-activity approach over a five

week period in collecting data on the daily routines of five chief executive officers. The following distribution of activities was determined:

Activity	Frequency	Avg. Length in Minutes
Desk Work	33%	15
Telephone Calls	24%	6
Scheduled Meetings	19%	68
Unscheduled Meetings	19%	12
Tours	5%	11

(pp. 33-39).

More evidence of the fragmented, diversified, and terse nature of a manager's daily routine can be found in the scope and nature of contacts with people in and out of the organization. Mintzberg (1973) collected the following data on verbal and mail contacts of managers:

Contacting Entity	Verbal	Mail(From)
Subordinates	48%	39%
Clients	20%	13%
Peers	16%	25%
Independents/Others	8%	22%
Directors	7%	1%

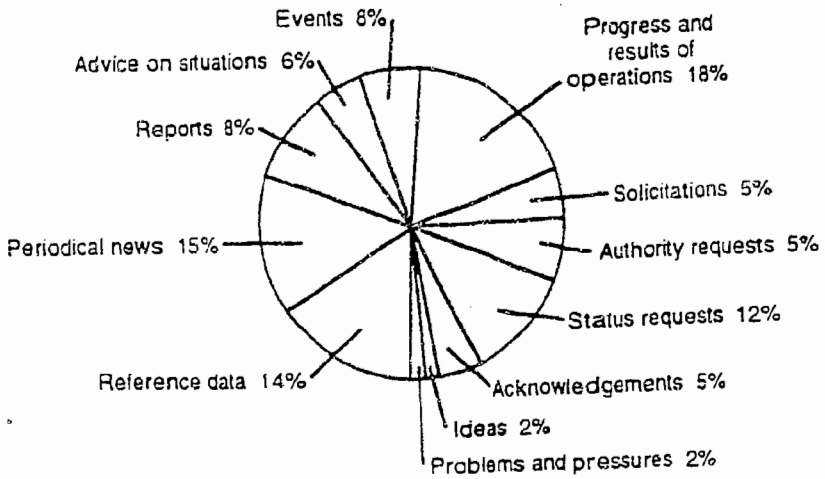
(p. 46).

Figure 2.1 on the next page further illustrates the amounts and purposes of verbal contacts as well as the distribution of incoming mail related to daily managerial activities. As may be noted from Figure 1, a manager is under pressure to deal with a great variety of stimuli from within and without the organization. This environment, according to Mintzberg, does not encourage development of reflective planners, but, rather, "breeds adaptive information-manipulators who prefer the live, concrete situation" (Mintzberg, 1973, p. 38). In a stimulus-response world, the manager develops a preference for live action.

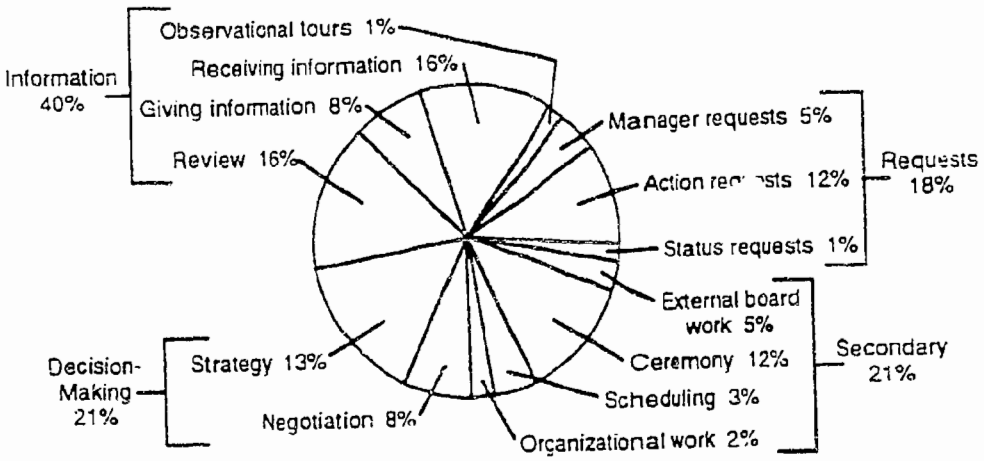
FIGURE 2.1

THE PURPOSES OF MANAGERIAL ACTIVITIES

Distribution of Incoming Mail by Purpose



Distribution of Hours in Verbal Contact by Purpose



Source: Mintzberg, H. (1973). The nature of managerial work. New York: Harper and Row.

Based on specific activities a manager would experience on a daily basis, Mintzberg (1973) defined ten roles that in a gestalt or integrated manner explained what managers actually did; this was the essence or crux of Mintzberg's study: a theory that delineated what managers, in fact, did as they fulfilled their contractual responsibilities. These ten roles were assembled into three categories: interpersonal, informational, and decisional.

Interpersonal Roles

1. Figurehead--most basic and simple of all roles. Based on his formal authority, the manager is a symbol, obliged to perform nonconsequential or inspirational duties which involve interpersonal activity.
2. Leader--permeates all managerial activities; as leader, the manager welds diverse elements into a cooperative enterprise, making this the most significant of all roles. The key purpose is to integrate individual needs with organizational goals.

3. Liaison--as liaison, the manager links the external environment with his/her organization. This is accomplished through a vital web of relationships that a manager maintains with individuals and groups outside the organization.

Informational Roles

4. Monitor--the continual seeking of information that permits the manager to understand what is happening in the organization and its surroundings. Information helps the manager perceive changes, identify problems and opportunities, understand his environment, know when information must be disseminated and decisions made.
5. Disseminator--the relaying of external information into the organization and internal information from one subordinate to another; information may be factual (may be tested as to its validity) or value (deals with preferences; neither correct or incorrect).

6. Spokesman--as spokesman, the manager conveys information outside the organization to its environment. He/she must keep two groups informed: the board of directors and the public.

Decisional Roles

7. Entrepreneur--related to the monitor role; here, the manager initiates and designs "controlled" change in the organization. Change is controlled meaning the manager exercises his/her own free will in exploiting opportunities or solving problems. The manager becomes involved in improvement projects through one of three ways: delegation, authorization, or supervision.
8. Disturbance handler--acting as a generalist, the manager deals with change and involuntary situations that are beyond, at least partially, his/her control. Three types of disturbances are: 1) conflicts between

subordinates; 2) difficulties between organizations; and 3) loss or potential loss of resources. Because of the precedents they may set, managerial decisions (in disturbance handling) can have great impact on organizational strategy.

9. Resource allocator--resource allocation is, according to Mintzberg, the heart of the organization's strategy-building system. Resources that may be allocated positively or negatively include money, time, material and equipment, and reputation. Decisions affecting resource allocation are classified as follows: 1) scheduling of time; 2) programming work; and 3) authorizing actions.
10. Negotiator--interceding on behalf of the organization, the manager participates in negotiations with other organizations or with individuals. He/she participates as *figurehead*, adding credibility to the proceedings; as *spokesman*, representing his organization's information and value system

to those outsiders; as *resource allocator*, having the authority to commit organizational resources (Mintzberg, 1973).

In the preceding section, the general nature of managerial work was explored. Attention was given to the various demands made upon a manager's or CEO's time in several key areas including decision-making. Managers, corporate executives, and school superintendents experience daily those elements of management that impede and, conversely, challenge the chief executive officer in his discharge of duties and fulfillment of leadership.

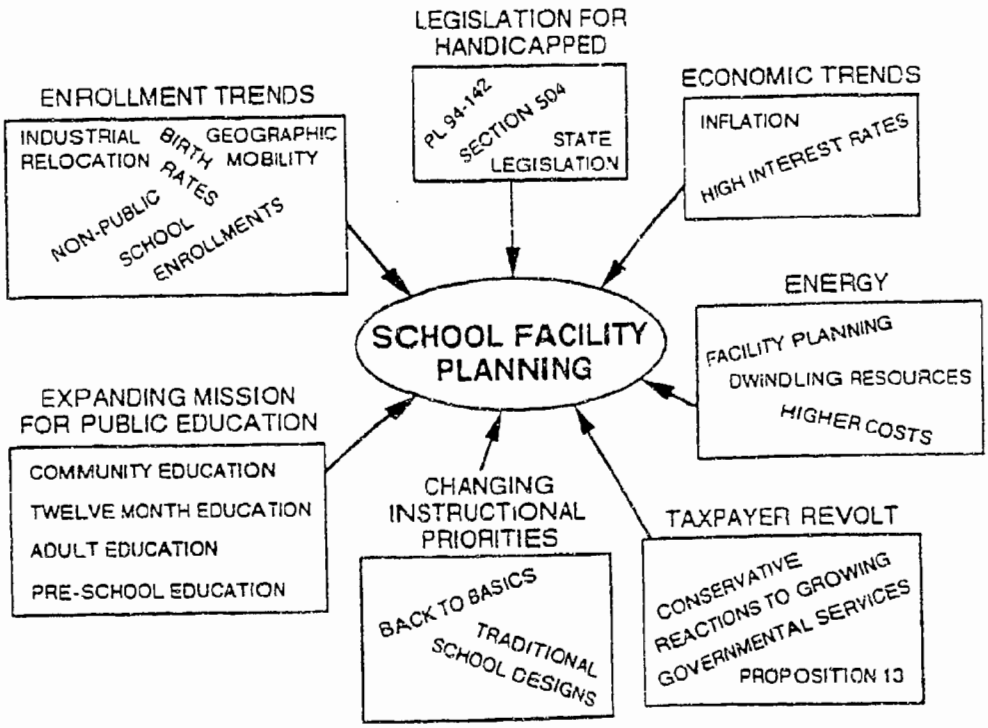
THE ROLE OF THE SUPERINTENDENT AS PLANNER FOR EDUCATIONAL FACILITIES

"A prime purpose of planning is to reduce uncertainty and focus organizational activities so as to utilize resources efficiently" (Guthrie and Reed, 1986, p. 243). Educational planning is seen as a management function that should occur at the federal, state, and local level. Local administrators, for example, plan for new buildings, changes in curriculum, variations in

bus routes or attendance boundaries, implementation of new student grading policies, and establishing new school site parent advisory committees (Guthrie and Reed, 1986). From the standpoint of state function, legislative mandates enter the planning process in significant ways with respect to educational facilities. Section 16.053 of the Texas Education Code stipulates that to meet state accreditation standards "a school district may not enroll more than 22 students in a kindergarten, first, second...third, or fourth grade class" (Texas Education Agency, 1988, p. 113). Furthermore, Section 16.402 of the Code directs the State Board of Education to establish standards for adequacy of school facilities. "The standards shall include requirements related to space, educational adequacy, and construction quality" (Texas Education Agency, 1989, p. 64). Legislation is only one of numerous forces that impact planning for school facilities today. [Some of these constraints are illustrated in Figure 2.2, next page].

FIGURE 2.2

FORCES AFFECTING SCHOOL PLANNING



Source: Kowalski, T. J. (1983). Solving educational facility problems. Muncie, Indiana: Accelerated Development Incorporated.

The superintendent, as a leader of the administrative team and agent of the board of education, follows a planning process much like that of other organizations; furthermore, educational schemata may emulate a paradigm similar to problem solving or decision making. In discussing the steps of a fundamental planning process, Guthrie and Reed (1986) relate that: 1) a problem is identified; 2) possible causes of the problem are identified; 3) possible solutions are generated; 4) costs and effects of solutions are determined; and 5) alternatives are assessed and ranked.

A number of authors address the importance of the superintendent's involvement in the educational facility planning process. These include: Hedley and Brokaw (1984), Groves (1985), Candoli (1973), Kowalski (1983), Hultgren (1985), Kimbrough and Nunnery (1988), Day (1985), Knirk (1979), Kowalski (1989), Davis and Loveless (1981), Stoops et al. (1981), Guthrie and Reed (1986), Association of School Business Officials of the United States and Canada (1980), and the Council of Educational Facility Planners, International (1976). As stated in the introduction, planning for facilities is a

complex political, social, fiscal, and technological/professional procedure, and at the epicenter of the process is the superintendent. Candoli et al. (1973) found:

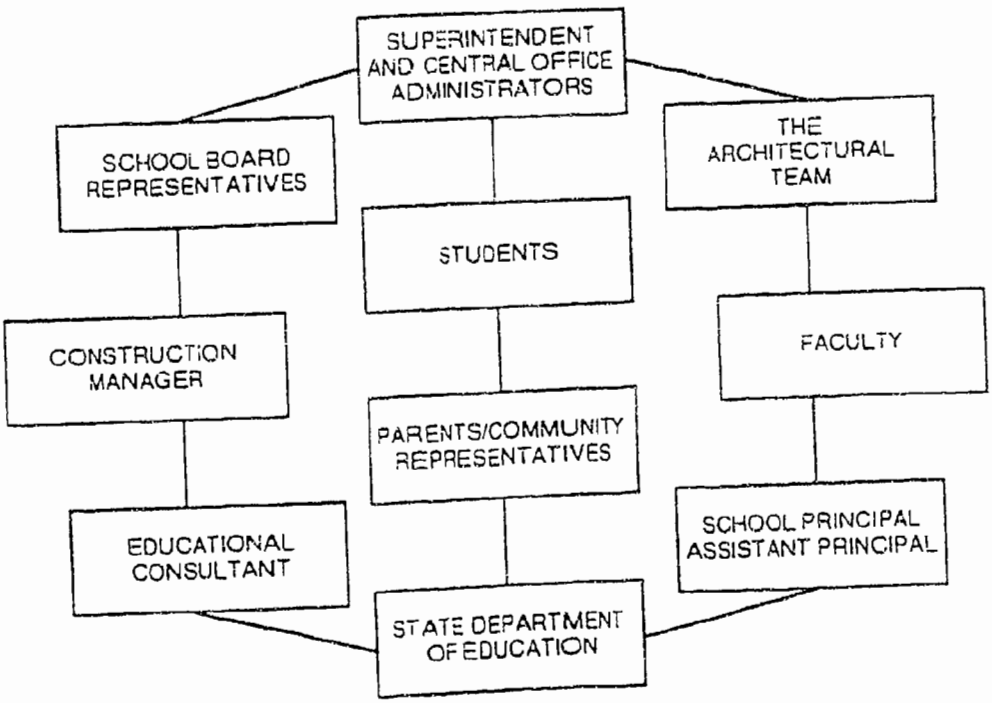
> Resource personnel from the local, state, and national level plus professional staff, students, and community leaders will be involved in any major capital outlay project. The board of education is a key group because it must ratify suggestions of others to legalize the proceedings. The involvement of the board of education will necessitate the involvement of the superintendent and his staff (p. 342).

Hedley and Brokaw (1984) state that the planning process should involve--as a team--administrators, facility planner, architect, and others formed at the inception of the project. Through cooperative effort of a design advisory committee, for example, a school plant which meets the needs of the educational program may be constructed. [Figure 2.3 on the next page provides an example of who might be involved in facility planning]. In describing the participation of knowledgeable administrators in the planning process, Groves (1985)

contends, "School administrators in particular involved in construction should have a good understanding of the nature of services to be performed by architects and engineers during construction" (p.4). Groves (1985) finds that the architect typically will work closely with the superintendent and his staff "to develop and refine the program or statement of needs which becomes the source for design decisions and early cost estimates" (p. 4).

FIGURE 2.3

POSSIBLE PLANNING PARTICIPANTS



Source: Kowalski, T. J. (1983). Solving educational facility problems. Muncie, Indiana: Accelerated Development Incorporated.

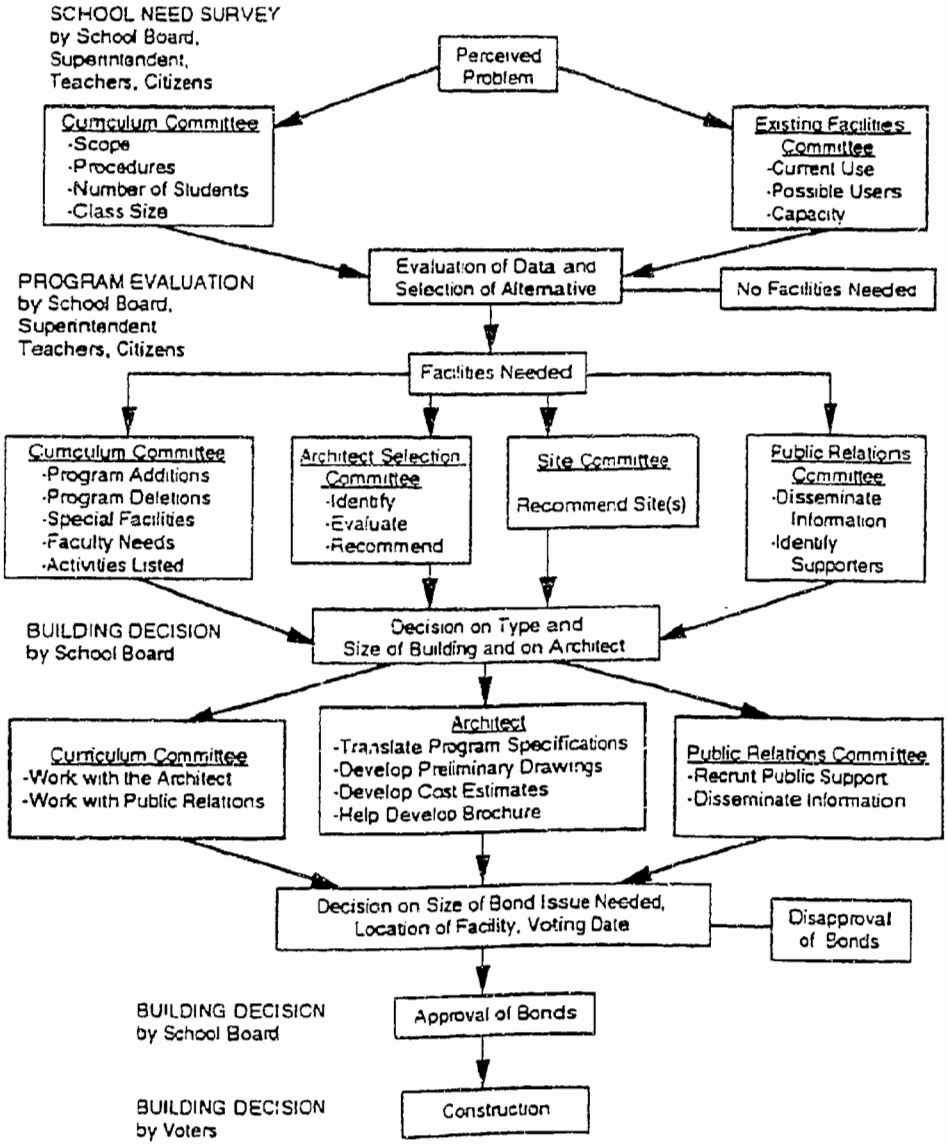
The hiring of construction managers by school districts is seen as a way of reducing cost factors, schedule, and quality pressures brought to bear on administrators. But the necessity of a collegial effort in planning between administrator and construction manager is emphasized by Hultgren (1985):

> Districts want cost, schedule and quality addressed with equal expertise. With their school projects so much in the public eye and their jobs on the line, administrators need real predictability and the highest quality performance" (p. 9).

From identification of the need for new facilities through overseeing the work of various committees which develop specifications, recommend an architect, and disseminate information, the superintendent plays a central role in the planning of educational facilities. [This is illustrated on the next page in Figure 2.4].

FIGURE 2.4

FACILITIES PLANNING



Source: Knirk, F. G. (1979). Designing productive learning environments. Englewood Cliffs, New Jersey: Educational Technology Publications.

VROOM-YETTON NORMATIVE MODEL OF DECISION MAKING

Victor H. Vroom and Philip W. Yetton in Leadership and Decision-Making describe a model for decision making which was written primarily for scholars/researchers interested in leadership, decision making, and organizational behavior and managers/administrators seeking to improve their decision making behaviors (Vroom and Yetton, 1973).

Expressed as a member of the family of contingency or situational leadership theories, the Vroom-Yetton model treats leadership as a social process emphasizing events that occur between people rather than circumstances that transpire within a person (Vroom and Yetton, 1973), (Vroom, 1973), (Vroom and Jago, 1974), and (Samples, 1983). Events that occur between people are related to what extent a leader encourages participation of followers in the decision making process (Vroom, 1974), (Vroom, 1976), and (Yukl, 1989).

The model is normative since it addresses what kinds of decision making processes leaders *should* use to deal effectively with problems they encounter in their jobs and how much and in what form to involve followers in

deciding how to solve these problems. In developing a set of ground rules for matching a leader's decision behavior to the demands of the situation, a set of alternative decision processes were developed. These are depicted in Table 2.1. In the Table the first letter of the symbol, e.g., AI, CI, GII, etc., used to represent each process signifies the basic properties of the process--A for autocratic; C for consultative; and G for group (Vroom, 1973).

Three classes of outcomes sustain the ultimate effectiveness of decisions. These are:

1) The quality or rationality of the decision.
2) The acceptance of commitment on the part of subordinates to execute the decision effectively.
3) The amount of time required to make the decision (Vroom, 1973, pp.67-68).

Yukl (1989) states that decision quality relates to objective aspects of the decision taken separately from the aspect of decision acceptance, which is the extent of follower commitment to implement a decision productively. A decision of superior quality is one where the best alternative is chosen. With respect to the amount of time required for resolution, a decision

may be made over the long or short term depending upon factors such as the desire on the part of leaders to develop followers or produce a more effective problem solving system (Vroom, 1973).

TABLE 2.1

DECISION MAKING PROCESSES

For Group Problems

AI You solve the problem or make the decision yourself, using information available to you at the time.

AII You obtain the necessary information from your subordinate(s), then decide on the solution to the problem yourself. You may or may not tell your subordinates what the problem is in getting the information from them. The role played by your subordinates in making the decision is clearly one of providing the necessary information to you, rather than generating or evaluating alternative solutions.

CI You share the problem with relevant subordinates individually, getting their ideas and suggestions without bringing them together as a group. Then *you* make the decision that may or may not reflect your subordinates' influence.

CII You share the problem with your subordinates as a group, collectively obtaining their ideas and

suggestions. Then *you* make the decision that may or may not reflect your subordinates' influence.

GII You share a problem with your subordinates as a group. Together you generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. Your role is much like that of chairman. You do not try to influence the group to adopt "your" solution and you are willing to accept and implement any solution that has the support of the entire group.

Source: Vroom, V. H., & Yetton, P. W. (1973). Leadership and decision-making. Pittsburgh, Pennsylvania: University of Pittsburgh Press.

Vroom and Yetton (1973) provide a set of rules in the model which identifies any decision procedure that is unsuitable in a given circumstance because decision quality and/or acceptance would be jeopardized by using that procedure. The decision rules are summarized by Yukl (1989) in the following:

1. When the decision is important and subordinates possess relevant information lacked by the leader, an autocratic decision (AI, AII) is not appropriate because an important decision would be made without all the relevant, available information.
2. When decision quality is important and subordinates do not share the leader's concern for task goals, a group decision (GII) is not appropriate because these procedures would give too much influence over an important decision to uncooperative or even hostile persons.
3. When decision quality is important, the decision problem is unstructured, and the leader does not possess the necessary information and expertise to make a good decision, then the decision should be made by interaction among the people who have the relevant information (GII).

4. When decision acceptance is important and subordinates are unlikely to accept an autocratic decision, then an autocratic decision (AI,AII) is not appropriate because the decision may not be implemented effectively.

5. When decision acceptance is important and subordinates are likely to disagree among themselves about the best solution to an important problem, autocratic procedures and individual consultation (AI, AII, CI) are not appropriate because they do not provide the opportunity to resolve differences through discussion and negotiation among subordinates and between the subordinates and the leader.

6. When decision quality is not important but acceptance is critical and unlikely to result from an autocratic decision, the only appropriate procedure is a group decision (GII) because acceptance is maximized without risking quality.

7. When decision acceptance is important and not likely to result from an autocratic decision, and subordinates share the leader's task objectives, subordinates should be given equal partnership in

the decision process (GII), because acceptance is maximized without risking quality (pp. 114-115).

In some circumstances, more than one decision procedure may be prescribed by the model. In this case, the choice among procedures in the feasible or viable group of procedures are based on other criteria, such as time constraints, follower development, or leader preferences (Yukl, 1989). A decision process flow chart which illustrates the application of decision rules is found in Figure 2.5 on a following page.

The utilization of the Vroom-Yetton Normative Model of Decision Making in this study of roles and processes of superintendents is appropriate since improved decision making as a part of a school CEO's repertoire of leadership skills is fundamental in the evolution and improvement of a school program. In developing a model for decision making, Vroom (1976) hopes to clarify the intersection between decision making and leadership, particularly the extent to which a leader encourages the participation of followers in the decision making process. Yukl (1989) states:

A basic assumption of the model is that participation increases decision acceptance if it is not already high, and the more influence subordinates have, the more they will be motivated to implement a decision (p. 112).

FIGURE 2.5

Decision Process Flow Chart

A. DOES THE PROBLEM POSSESS A QUALITY REQUIREMENT?

B. DO YOU HAVE SUFFICIENT INFORMATION TO MAKE A HIGH-QUALITY DECISION?

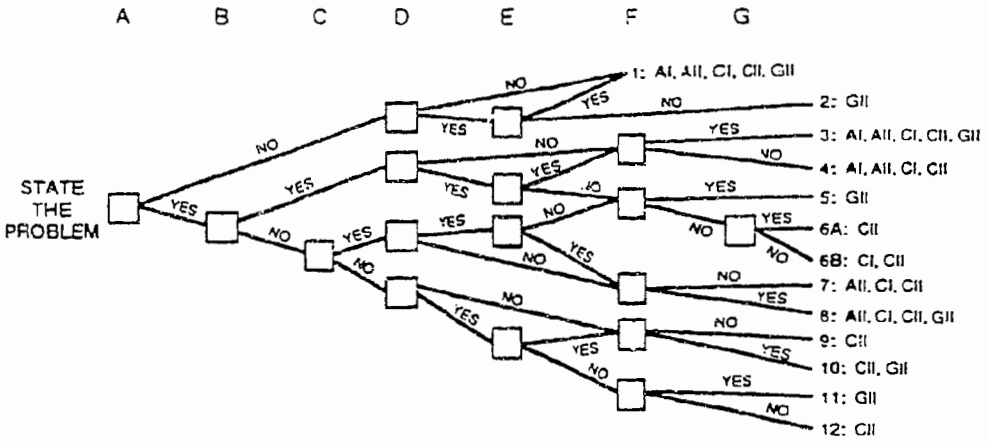
C. IS THE PROBLEM STRUCTURED?

D. IS ACCEPTANCE OF DECISION BY SUBORDINATES IMPORTANT FOR EFFECTIVE IMPLEMENTATION?

E. IF YOU WERE TO MAKE THE DECISION BY YOURSELF, IS IT REASONABLY CERTAIN THAT IT WOULD BE ACCEPTED BY YOUR SUBORDINATES?

F. DO SUBORDINATES SHARE THE ORGANIZATIONAL GOALS TO BE ATTAINED IN SOLVING THIS PROBLEM?

G. IS CONFLICT AMONG SUBORDINATES OVER PREFERRED SOLUTIONS LIKELY?



Source: Vroom, V. H., & Jago, A. G. (1988). The new leadership: Managing participation in organizations. Englewood Cliffs, New Jersey: Prentice Hall.

In validating the Vroom-Yetton model, Vroom and Jago (1988) examined six studies which may be compared with one another and that focused on the consequences of the model for decision success. Three studies were conducted in the United States (Vroom and Jago, 1978; Zimmer, 1978; Liddell, Elsea, Parkison, & Hackett, 1986); two in Canada (Field, 1982; Tjosvold, Wedley, & Field, 1986); and one in Austria (Bohnisch, Jago, & Reger, 1987). A total of 1,545 decisions were studied with 769 successful and 776 unsuccessful decisions identified. Vroom and Jago (1988) found that across all six studies, if a manager's behavior conformed to the normative model, the rate of success was 62 percent. However, if the manager's behavior failed to conform to the model, the rate of success was only 37 percent.

Vroom and Jago (1988) point out that no model in the social sciences can predict the consequences of a behavior with perfect accuracy since predicting the outcomes of organizational decisions can be problematic due to external factors that may not be known at the time the decision is made. Not withstanding, Miner concludes, after reviewing the same studies listed above "that no leadership theory surpasses the Vroom-Yetton

model in its scientific validity and practical usefulness. In every test attempted, the model is shown to improve the effectiveness of organizational decision making" (Vroom-Jago, 1988, p. 83).

In the next section, specific skills that have been identified as necessary for effective superintending will be discussed. Skills related to decision-making and school facility planning will be addressed and emphasized where appropriate.

SKILLS FOR EFFECTIVE SUPERINTENDING

Sclafani (1987) and Collier (1987) in companion studies identified skills effective for superintending on the national and state levels respectively. Working from performance areas and skills based on materials published by the American Association of School Administrators (AASA), Sclafani (1987) identified, from a national sampling of superintendents, the top six skills for effective superintending, in order of most important to less important:

1. Demonstrates a broad array of leadership skills.

2. Demonstrates sound principles of personnel administration.
3. Employs sound financial planning and cash flow management.
4. Employs effective school/community public relations, coalition building, and related activities.
5. Provides for effective evaluation of teacher performance.
6. Uses cost-effective techniques and sound program budgeting (p. 70).

In her study, Sclafani categorized responses by numbers of students enrolled. Table 2.2 on a following page indicates similarities and differences in the way respondents considered the significance of certain superintendent skills.

In a companion study, as mentioned above, Collier (1987) presented 52 skills to Texas superintendents and had them rate skills in terms of importance to their jobs. The top ten ranked skills are as follows:

1. Demonstrates a broad array of leadership skills.
2. Demonstrates sound principles of personnel administration.

3. Employs sound financial planning and cash flow management.
4. Employs principles of sound curriculum design and instructional delivery strategies.
5. Employs effective school/community public relations, coalition building, and related activities.
6. Ensures that instructional time and resources are used effectively.
7. Develops valid and reliable performance measures for instructional outcomes.
8. Provides for effective evaluation of teacher performance.
9. Utilizes motivation techniques.
10. Guides facility planning, maintenance, and operations (p. 166).

For a complete list of 52 skills ranked and compared to a national sample, see Appendix D.

TABLE 2.2

Most Important Skills by District Enrollment

Over 25,000 Students

1. Leadership skills
2. Collaborative goal setting
3. Personnel administration
4. Effective school/community relations
5. Articulate position for education
6. Effective teacher evaluation

10,001-25,000 Students

1. Leadership skills
2. Motivation techniques
3. Effective school/community relations
4. Personnel administration
5. Collaborative goal setting
6. Effective teacher evaluation

5,001-10,000 Students

1. Leadership skills
2. Personnel administration
3. Effective school/community relations
4. Effective teacher evaluation
5. Conflict mediation
6. Cost-effective techniques and program budgeting

1,001-5,000 Students

1. Leadership skills
2. Personnel administration
3. Effective teacher evaluation
4. Effective school/community relations
5. Sound financial planning
6. Use of mass media to shape and form opinions

501-1,000 Students

1. Personnel administration
2. Leadership skills

3. Sound financial planning
4. Effective school/community relations
5. Effective teacher evaluation
6. Effective use of instructional time and resources

1-500 Students

1. Leadership skills
2. Personnel administration
3. Sound financial planning
4. Effective school/community relations
5. Cost-effective techniques and program budgeting
6. Human relations skills

Source: Sclafani, S. (1987). AASA guideline of school administrators: Do they represent the important job behaviors of superintendents? Unpublished doctoral dissertation. The University of Texas at Austin.

Based on the review of the literature to this point on a superintendent's decision-making in school facilities planning, the following skills identified by Sclafani and Collier as important for effective superintending are pertinent to the subject of this study:

1. Demonstrates a *broad array of leadership skills.*
2. Employs *sound financial planning* and cash flow management.
3. Employs effective school/community relations, *coalition building*, and related activities.
4. *Utilizes motivation techniques.*

5. *Guides facility planning*, maintenance, and operations.

In her study, Collier (1987) also asked Texas superintendents what they perceived to be their greatest needs for professional development. The top ten needs are found in the following (see a complete list of needs, ranked and compared to a national sample of superintendents, in Appendix E):

1. Employs principles of sound curriculum design and instructional delivery strategies.
2. Develops valid and reliable performance measures for instructional outcomes.
3. Employs effective school/community public relations, *coalition building*, and related activities.
4. *Utilizes collaborative goal setting and action planning.*
5. Uses accepted theories of cognitive development in determining the sequencing and structuring of curricula.
6. Employs evaluation and planning models and methods.

7. Provides for effective evaluation of administrator and supervisor performances.
8. Demonstrates conflict mediation and the skills to accept and cope with inherent controversies.
9. Demonstrates a *broad array of leadership skills.*
10. Employs *sound financial planning* and cash flow management (p. 169).

Related to skills identified by Sclafani and Collier are transformational leadership behaviors which when incorporated with key skills in management and leadership serve to bolster the superintendent's decision effectiveness in school facility planning. The following discussion of transformational leadership will illustrate the importance of this type of leadership in a superintendent's decision making roles and processes with respect to school facility planning.

Transformational Leadership

The effective leader, according to Vroom, may be more or less participative in his approach to decision making depending upon the demands of the situation (Vroom, 1976). Interestingly, all problem attributes as given on the Decision Process Flowchart in Figure 5 allow for consultative or group decision processes, if time is not a factor.

Baker (1980) found that leaders may be democratic *and* authoritative in their relationships with followers and still accomplish organizational objectives. This was accomplished through increased involvement of followers in the decision process. Baker (1980) states:

> It is difficult to envision any organization, short of correctional institutions, that are not more participative than autocratic in the decision process...In the field of education the very nature of its organization and norms dictates that groups and group decision making must dominate most internal decisions (Baker, 1980, p. 4).

Baker, Roueche, and Gillet-Karam (1990) in Teaching as Leading profiled effective community college teachers

and their influence on students. Using path-goal theory (House and Mitchell, 1974) to describe teacher as leader behaviors and their cumulative effect on the motivation of students, Baker et al. (1990) found "that both the work of leaders (teachers) and their style of leading vary with the situation (students' maturity)" (p. 59). However, what is equally as important is that the leader is part of an organization which must adapt to a changing environment in order to survive. In developing, shaping, and transmitting organizational culture, leaders fulfill a moral obligation to followers. This imparting of culture goes beyond simple transactions, the ordinary give and take of the everyday business of processing information, balance sheets, production records--to transformation--envisioning higher goals to be realized by leader and follower together (Baker et al., 1990).

Although controversy has existed over the last two decades as to whether situational paradigms (e.g., Vroom-Yetton Normative Model and others) explains leadership more effectively than universal theories (e.g., transformational models), Yukl (1989) believes the debate may be settled "if theorists recognize that

leadership behavior can be described at different levels of abstraction" (p. 274). Yukl (1989) states:

> Rather than being incompatible, both theories are correct when they are stated in terms of appropriate behavior constructs. The appropriate universal hypothesis is that effective leaders act in ways reflecting a concern for both task and relationships in each specific situation. The appropriate situational hypothesis is that aspects of the situation determine which specific leader behaviors are more likely to result in achievement of task objectives and maintenance of effective relationships (p. 274).

That effective leaders act in ways reflecting a concern for both task and relationships with people was addressed in a study by Blake and Mouton (1964). These researchers described five managerial styles that varied according to a) how much concern was given to production and b) how much concern was given to people. In the 9,9 style of management, production and people are integrated, giving those responsible for production involvement and participation in work planning and execution. Because individual goals are in line with

organizational goals and people are committed through interdependent effort, the entire organization improves in performance (p.180).

By involving followers and others in decision making, the superintendent improves the quality of decisions, increases the likelihood of their acceptance, develops and may even transform subordinates. Through using improved decision making processes, a school district's chief executive may demonstrate characteristics of transformational leadership.

Various studies confirm James MacGregor Burns's contribution to the development of transformational leadership theory (Baker et al., 1990), (Roueche et al., 1989), (Yukl, 1989), (Bass, 1985), (Tichy and Devanna, 1990), (Kotter, 1988), (Hitt, 1988), (Britton and Stallings, 1986), (Orr, 1990), (Pena, 1990), and (Kosuth, 1990). Burns (1978) defines transformational leadership by contrasting it with the transactional relationship most leaders have with followers. Transactional leaders "exchange jobs for votes or subsidies for campaign contributions" (p. 4). Transformational leadership is more complex but more potent. The transformational leader recognizes needs in

followers and exploits those needs like the transactional leader, but he also "engages the full person of the follower" seeking "to satisfy higher needs" (p. 4). The relationship between transformational leader and follower that develops is mutually stimulating and elevating and eventually "converts followers into leaders and may convert leaders into moral agents" (p. 4). "Moral leadership," says Burns (1978), "emerges from, and always returns to, the fundamental wants and needs, aspirations, and values of the followers" (p. 4). Burns's moral leadership is akin to what Drucker (1967) termed as "self-development" of the corporate executive:

> Self-development of the effective executive is central to the development of the organization, whether it be business, a government agency, a research laboratory, a hospital, or a government agency...As executives work toward becoming effective, they raise the performance of the whole organization. They raise the sights of people--their own as well as others. As a result, the organization not only becomes capable of doing better, it becomes capable of doing different

things and of aspiring to different goals.

> Developing executive effectiveness challenges directions, goals, and purposes of the organization. It raises the eyes of its people from preoccupation with problems to a vision of opportunity, from concern with weakness to exploitation of strengths. This in turn, wherever it happens, makes an organization attractive to people of high ability and higher dedication. Organizations are not more effective because they have better people. They have better people because they motivate to self-development through their standards, through their habits, through their climate (p. 170).

Expanding on this theme, Burns (1978) states:

> The genius of leadership lies in the manner in which leaders see and act on their own and their followers' values and motivations. Leadership, unlike naked power-wielding, is thus inseparable from followers' needs and goals (p. 19).

In discussing the relationship of Maslow's concept of self-actualization and the potential to lead, Burns (1978) finds that transformational leaders go beyond self-actualization in their capacity to learn from

others and from the environment. It is a kind of interdependence that moves on the ability of the leader to listen, to be guided by others without being threatened, to be dependent on others without being overly so, to appraise others with both warmth and discernment, to have enough independence to be creative without repudiating the external influences that stimulate growth and significance. "Self-actualization ultimately means the ability to lead by being led" (p. 117). A superintendent involving followers in the decision making process in planning for educational facilities has the opportunity to transform followers through going beyond his/her own self-actualization--to lead by being led.

Using decision styles as a reference point, Bass (1985) delineates differences between transactional and transformational leaders. In varying degrees, either may be directive, negotiative or persuasive, consultative, participative, or delegative. For example, the transactional leader gives certain payoffs to subordinates for following directions while the transformational leader may identify transcendental or extraordinary goals to which he may help followers

aspire to achieve: example--a superintendent and staff working together in having a school or school district being recognized as not only the #1 school in the region but #1 in the state for academic performance. The transactional leader may barter with subordinates for services rendered; the transformational leader, on the other hand, may render compelling symbols and conceptions about what a revitalized organization would look like. The transactional leader may confer with a subordinate on what he/she wants to collect in return for following orders while the transformational leader may consult with followers concerning their knowledge of the significance of the organization's paramount objectives.

For Bernard Bass (1985) a model "is a simplified replica of reality" (p. 13). His model of transformational leadership adds to or modifies Burns' (1978) transformational leadership model in several fundamental ways: 1) an expansion of followers' needs and wants (beyond the political realm); 2) influences by leaders on followers may be of short or long term benefit *or cost* to followers (transformational leadership may not be beneficial leadership,

necessarily); and 3) over a period of time leaders may act both transactionally or transformationally in varying amounts as opposed to being *either* transactional *or* transformational--this, at the end of a single continuum of transactional leadership. Fundamental to the model is how a transformational leader encourages additional effort on the part of followers. This is accomplished through expanding a follower's assortment of needs; transcending one's self-interest for the sake of the organization or school; and changing or enlarging a follower's needs on Maslow's or Aldefer's hierarchy of needs (Aldefer simplified Maslow's five level ranking of needs into three). According to Bass (1985), they are:

> 1) existence needs (safety and security); 2) need for relatedness (love and affiliation), and 3) need for growth (esteem and self-actualization) (p. 15).

Using his model of transformational leadership, Bass assembled a scale for discriminating between transactional and transformational leaders based on followers perceptions of them. A factor analysis of the 73 item questionnaire yielded three factors descriptive of transformational leadership and two which described

transactional leadership. Factors which described transformational leadership were: 1) charismatic leadership; 2) individualized consideration; and 3) intellectual stimulation. Transactional leadership factors were: 1) contingent reward; and 2) management-by-exception (Orr, 1990). Charismatic leaders have high expectations and confidence in their followers raising followers' self-confidence and levels of accomplishment. Individualized consideration is the attention afforded a follower by a mentor/leader. One-on-one communication, concern for individual differences by the leader, and delegation of responsibility by leader to follower characterize this component. When a leader causes a follower to use values, beliefs, thought, and imagination in new patterns to solve problems, then the third ingredient of transformational leadership, intellectual stimulation, has activated. Contingent reward, an element of transactional leadership, is praise, recognition, recommendations for pay increases, and promotions that accrue to employees when they demonstrate effort leading to accomplishment of organizational goals. Through frequent communication about job related matters, transactional leaders clarify

subordinates' expectations about what they can expect in return for their efforts. Management-by-exception occurs when leaders' only meaningful association with subordinates occurs when something goes wrong. Reprimand, censure, and blame are passed on to subordinates who may experience penalties, fines, loss of a job, loss of security, freedom, or even loss of life (Orr, 1990).

In describing transformational self-renewing processes of organizations, Tichy and Devanna (1990) found decision making to be creative and intuitive with less emphasis on analytical techniques. "...there is expansion in sharing. Interpersonal relationships are open and there are high levels of trust" (p. 267). Organizations that survive over the long term are democratic; decentralization of power enables organizations to be productive for the next decade. Transformational leaders are powerful, yet they are not dictators. They are sensitive, have faith in people, and work toward the empowerment of others (Tichy and Devanna, 1990).

The empowering aspects of transformational leadership may be seen in terms of building and

developing self-esteem of followers. Bennis and Nanus (1985) found that (transformational) leaders:

> ...lead by pulling rather than by pushing; by inspiring rather than ordering; by creating achievable, though challenging, expectations and rewarding progress toward them rather than by manipulating; by enabling people to use their own initiative and experience rather than by denying or constraining their experiences and actions (p. 225).

In shared decision-making, the superintendent empowers followers to use initiative and experience in making decisions thereby promoting collegial trust and growth of the school organization.

Effective school leaders in collaboration with followers build action plans that utilize energies of professionals to help institutions evolve. As mentioned above, Baker et al. (1990) found that proactive leaders follow a situational model of leadership, at times task-oriented--concerned with structured problem solving, while at other times people-oriented--concerned with building organizational commitment through collaboration emphasizing morale and consideration of others. For instance, a teacher may find that students are basically

immature and will, therefore, be directive in his/her approach to teaching and make all decisions for the class. Examples of directive teacher behavior are:

>>>spells out precisely the student's role in the teaching and learning process;

>>>tells the learner what to do, where to do it, when to do it, how to do it, and how performance will be evaluated;

>>>closely supervises the learner's performance through constant observation and feedback; and

>>>provides early and continuous planning and organizing of the curriculum and expectations for students (p. 248).

On the other hand, if a teacher finds that students are ready to accept greater responsibility, he/she may be supportive and engage in two-way communication with students. Additionally, the teacher may:

>>>listen to student's learning problems and needs, and provide support, encouragement, and specific instruction on task;

>>>engage in constant interaction with the students that is teacher-oriented and teacher-directed; involve the students in the decision-making

process to the extent to which this process relates to student performance;

- listen to students' problems, whether they are curriculum-related or not;
- praise the student for adequate or superior performance; and
- seek the students' suggestions or inputs primarily around how to accomplish learning goals (p.249).

In an earlier study of community college leaders, Roueche et al. (1989) determined that successful leaders depended on others. Followers' input is needed in decisions affecting the institution, no matter what level in the hierarchy followers occupied. Transformational leaders empower followers to participate in decision processes as well as accept responsibility for their role or part in these processes.

As pointed out earlier, Bass (1985) found that transformational and transactional leaders may use all decisional styles but in varying ways. Analogous to the Vroom-Yetton Model, they may be directive or authoritative, consultative, or participative. They may also be, according to Bass, negotiative or persuasive

and delegative in decisioning procedures.

In a qualitative study investigating transformational leadership behaviors of 51 Texas public school superintendents, Buck (1989) found that an important strand of transformational leadership was involving others in goal setting and decision-making. Superintendents reported that they used participative decision-making in working with parents, staff members, students, and community members. Respondents who recounted successful collaborative decision experiences expressed the desire to continue to use this decision process because it provided a good product and an opportunity for people to work together as a team. In a study of groups at work, Mink, Mink, and Owen (1987) found that teamwork fulfilled people's needs to belong, to feel and be connected. Teamwork built trust among members and allowed them to put their energies into tasks to be accomplished instead of protecting themselves.

In her study Buck (1989) identified and ranked transformational behaviors for all respondents. The top ten behaviors in order of importance are as follows:

1. Involves others in goal setting and decision-

making.

2. Influences others to accept district goals.
3. Provides up-to-date and accurate information for new learning.
4. Uses research in decision-making and planning.
5. Sets goals based on need for change.
6. Sensitive to community/parent/board input.
7. Articulates a sense of mission.
8. Causes others to work together to solve problems.
9. Takes appropriate risks to bring about change
10. Advocates quality education (p. 156).

Theory Z

"Participative leadership implies that the leader permits or encourages group members to participate actively in discussion, problem solving, and decision-making" (Stogdill, 1974, p. 386). A school system, as a professional bureaucracy, tends to decentralize formal authority, allowing more participation in decision-making giving professionals more control over their own work (Mintzberg, 1979 & 1983).

An example of corporate participative decision-making may identify factors that could successfully transfer to a school environment contributing to a superintendent's expertise in decision-making for school facilities.

In Theory Z, William Ouchi (1981) detailed his examination of leadership/management methods of several Japanese corporations. He was interested in finding among other things how Japanese companies were able to efficiently produce prodigious quantities of high-quality products at relatively low cost. In part, he found that production of high quality materials did not come from more testing as in the case of the Japanese worker's American counterparts, but in management's involvement of workers to continually refine the design and manufacturing process. In involving workers, the objective was "to achieve commitment of employees to the development of a less selfish, more cooperative approach to work" (p. 98).

Ouchi (1981) coined the term Theory Z to describe an approach to management that suggests "involved workers are the key to increased productivity" (p.4). In Type Z organizations, such as those Ouchi investigated in

Japan, the decision-making process is typically a consensual, participative one. The participative process, says Ouchi, "is one of the mechanisms that provides for the broad dissemination of information and of values within the organization, and it serves the symbolic role of signaling in an unmistakable way the cooperative intent of the firm" (p. 78). Decisions by workers are made collectively, but each member of the group is held individually responsible for the success or failure of the decision, even if it's one he/she didn't prefer. Ouchi found that:

> This combination of collective decision making with individual responsibility demands an atmosphere of trust. Only under a strong assumption that all hold basically compatible goals and that no one is engaged in self-serving behavior will individuals accept personal responsibility for a group decision and make enthusiastic attempts to get the job done (p. 79).

CRITICAL INCIDENT TECHNIQUE

The Critical Incident Technique (CIT), developed by Flanagan (1954), provides the researcher with an effective method for pilot study development of scenarios which will be used to analyze decision making processes of school superintendents. CIT will serve the purpose of collecting examples of successful and unsuccessful behaviors referred to as critical incidents. This technique is defined by Flanagan (1954) as:

> a set of procedures for collecting direct observations of human behavior in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles (p. 327).

Flanagan (1954) explains incident as "an observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act" (p.327). For it to be critical, the incident "must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently

definite to leave little doubt concerning its effects" (p. 327). Key elements of CIT are: 1) analysis of job-related behavior; 2) analysis of the environment in which the activity occurred; 3) analysis and explication of the outcomes or results (Pena, 1990).

BEHAVIORAL EVENT INTERVIEW TECHNIQUE

An augmentation of the Critical Incident Technique, the Behavioral Event Interview Technique (BEIT) was developed by McClelland (1978). Originally drafted as an interview technique to help identify problems in the Navy's management training program, BEIT, says Spencer (in Pena, 1990), asked interviewees to identify successful job experiences and frustrating job experiences. Interviewees were asked to describe these experiences in detail focussing on what led to the experience; who was involved; what the interviewee felt, thought, and intended to do under the circumstances; what actually happened; and how resolution of the incident was accomplished.

BEIT helps to identify competencies that lead to effective job performance. McClelland (in Pena, 1990)

states that it also allows for the factoring out of behavioral competencies from narrative data that would provide an outline of abilities necessary to perform a task competently.

CHAPTER SUMMARY

Chapter two provides context for this study by reviewing applicable literature. This review presents the public school superintendent as CEO in historical perspective followed by a discussion of the managerial role of the superintendent. Management theory as it relates to the daily responsibilities of managers or chief executive officers is considered. Next, the role of the superintendent with respect to educational facility planning is discussed. Following facility planning, this chapter addresses the Vroom-Yetton Normative Model as a theoretical framework for analyzing the superintendent's decision processes, and this section examines elements of transformational leadership, a kind interdependence between leader and follower, that is exemplified by the ability of the leader to listen and to be guided by other without being

threatened. Theory Z is examined as it relates to skills in successful superintending, specifically, to decision-making processes. Finally, this segment of the study reviews the Critical Incident Technique and Behavioral Event Interview Technique. Chapter three will describe the design and methodology used in this study.

C H A P T E R T H R E E

RESEARCH DESIGN AND METHODOLOGY

INTRODUCTION

A Texas public school superintendent's decision making roles and processes in educational facility planning is the focus of this study. Results of this investigation have the potential of improving a critical facet of the chief executive officer's cadre of leadership skills in transforming today's public schools to those required to meet the educational goals and necessities of the twenty-first century.

Chapter two presents relevant literature that appertains to this study concerning: 1) the setting and role of the superintendent as chief executive officer; 2) the superintendent as planner for educational facilities emphasizing the significance of informed decision making as a part of the process; 3) the Vroom-Yetton Normative Model for decision making as a framework for studying and improving a superintendent's decision making processes; 4) transformational

leadership theory as it involves optimal decisioning processes and related leadership variables critical to success of a school's chief executive; and 5) the Critical Incident Technique (CIT) and the Behavioral Event Interview Technique (BEIT) as research tools useful in inspecting behavioral competencies.

This chapter outlines the research design and methodology which guides this study. A rationale for methodology used is presented and research questions are stated. This chapter, as well, addresses a pilot study conducted for the purpose of constructing a scenario as a part of the instrumentation for data collection. Additionally, the sample of subjects under investigation and approaches to statistical analysis of data will be presented.

RATIONALE FOR METHODOLOGY

The development of instrumentation for this investigation began with a pilot study. Chadwick, Bahr, & Albrecht (1984) find that pilot studies may reveal problems of design, ambiguous instructions or other deficiencies and allow for timely corrections or

adjustments. The pilot examination entailed administration of a critical incident interview to a group of prominent Texas superintendents and facilities' consultants identified through the auspices of several of the following: the Department of Educational Administration of the University of Texas at Austin, the Texas Association of School Boards, the Texas Association of School Administrators, and the Texas Education Agency. These superintendents and consultants, as participants of the pilot study, responded verbally to an interviewer asking them to describe a successful incident in which they were involved in making decisions concerning educational facility planning. At this point, credit must also be given to Dr. John Holcomb (1988) of Tarleton State University whose publication "A Guide to the Planning of Educational Facilities" was fundamental to early scenario development.

Upon completion of the critical incident interview, this researcher constructed a composite of experiences related in the interviews by the designated, experienced professionals. In identifying those competencies that resulted in a successful experiences, the Behavioral

Event Interview Technique process was employed. The researcher then returned the scenario to the cadre of superintendents and consultants for their input as to the authenticity of the scenario. The researcher modified, if needed, the scenario based on participant input until consensus was reached among members of the pilot group as to the scenario's utility and legitimacy. At the point of consensus, the researcher prepared to administer the scenario to the participants in the study. It was the researcher's purpose to construct a scenario as accurately as possible, hence, the utilization of a pilot study to develop and certify a precise instrument. A copy of the scenario used in this study may be found in Appendix A.

The use of scenarios in research design is advantageous for several reasons. Pashiardis (1990) and Fredrickson (1984) report that written decision scenarios in combination with other methods yielded quantitatively viable information. As a scientifically feasible technique, scenarios provide respondents with a standardized frame of reference negating the effects of subjective interpretations, that sometimes confound the results of questionnaires used in isolation.

Fredrickson (1984) explains:

> ...the scenario appears to be helpful by creating in respondents a more restricted, common field of vision, which, though desirable, is not likely to occur when questions are presented independently (p. 459).

If a scenario is constructed carefully, it should generate interest and involvement on the part of participants, and, as a result of this interest and the fact that it is a research method that relies on participant response, it should then be more successful (Fromkin and Streufert, 1976).

The other type of instrument the researcher used in collecting data was a questionnaire. As a type of survey, a questionnaire has several distinct advantages over other forms of data collection. Chadwick et al. (1984) found that questionnaires: 1) are economical; 2) allow respondents time to consult with others, review records, contemplate answers to questions; 3) provide a useful way to obtain information about sensitive topics; and 4) are iess biased toward socially desirable responses. Pena (1990) and Chadwick et al. (1984) note that, in general, survey research methods allow data

collection from large numbers of subjects in relatively short periods of time as well as the uncomplicated participation of respondents.

Three issues of validity must be addressed in research studies: construct, internal, and external validity. Kidder and Judd (1986) define these as follows:

1) construct validity--the extent to which constructs of theoretical interest are successfully operationalized in the research;
2) internal validity--the extent to which the research design permits us to reach causal conclusions about the effect of the independent variable on the dependent variable; and
3) external validity--the extent we can generalize from the research sample and setting to the populations and settings specified in the research (questions) (p. 28).

Construct validity of the scenario and questionnaire was deemed to be significant based on the use of items (in the questionnaire) from the use of a pilot study employing experts in the field who systematically provided feedback in a concerted effort to develop a

precise and pragmatic instrument. Internal and external validity will be addressed as appropriate in following sections of this dissertation. Survey research attempts to confirm the incidence and distribution of characteristics or the relationship among those characteristics in a population (Kidder and Judd, 1986). A common design in survey research that attempts to explain or interpret relationships is the static-group comparison strategy:

Static-Group Comparison Design

X O

O

This design portrays two or more comparison groups defined by their value on X (Kidder and Judd, 1986) and (Pena, 1990). Using this design, one is able to compare and measure the relationship between two groups. For example, X could depict Vroom-Yetton (1973) decision making processes of superintendents and O could depict business managers perceptions of these processes. Vroom-Yetton (1973) decision processes (independent variables) are those factors that explain or predict business managers perceptions of processes (dependent

variable).

RESEARCH DESIGN AND QUESTIONS

As mainly a descriptive study, this work seeks to 1) discern decision making processes of Texas school superintendents and 2) how these compare to that of followers' decision making processes. Rather than engaging in hypothesis testing, the researcher will explore patterns of identifiable behaviors that may generate hypotheses to be tested subsequently in other research. The research questions are guided by the Vroom-Yetton (1973) Normative Model.

This study is to be guided by the following research questions:

1. When superintendents make decisions concerning planning of school facilities, to what extent do these decisions follow the Vroom-Yetton (1973) Model?

2. To what extent do business managers verify decisional characteristics employed by their superintendents in educational facility planning?

Each research question is linked to further understanding the superintendents' role in leadership of Texas public schools. As stated in chapter one, it is appropriate to focus on decision making roles and processes of superintendents in educational facility planning to enhance quality of decisions made in this pivotal area of a school CEO's responsibility leading to improvement in his/her overall leadership effectiveness.

SAMPLE IDENTIFICATION AND SELECTION

The population of interest to this study was the superintendents and business managers of public school districts in Texas. The issue of size was a matter of significance in further delimiting the population from which a sample was drawn. Methodological constraints imposed by measures used for significant variables in this study and resultant effects on representativeness

of the sample require further definition of the population to be investigated.

As school district business managers were to be a part of this study alongside superintendents, the researcher had to be sure this group was represented in the population from which the sample was drawn. Orr (1990), in a study of superintendents' job performances, found that districts having less than 2500 students, kindergarten through twelfth grade, were likely to have a limited number of central office personnel. Therefore, a sample was drawn from those districts in the state that had over 2500 students in average daily membership.

In the state of Texas, there are 1068 school districts, 7 of which are common and the balance (1061), independent (Texas Education Agency, 1989). Utilizing resources available through the Texas Association of School Boards Membership Services Division in Austin, Texas, a sample of superintendents (and business managers) was randomly selected from a list of superintendents of schools which had over 2500 in student membership. To increase the likelihood of obtaining significant results after application of

statistical analysis, a sample of 230 superintendents and 230 business managers was selected.

DATA COLLECTION

As mentioned earlier, in determining superintendents' decision making processes and their followers perceptions of these processes, a scenario with a questionnaire attached was sent to each superintendent and business manager that worked under the superintendent. The scenario, relating to planning for educational facilities, were attached to a cover letter explaining the study, offering feedback on results, if requested, and thanking the respondents for their cooperation. The package, including a half-page seeking demographic information and self-addressed return envelopes, was mailed to each superintendent. Follow-up letters were planned and prepared in case they were needed to ensure a high rate of return of scenarios and questionnaires.

STATISTICAL ANALYSIS

Analyses of the data were carried out using SYSTAT: Getting Started, Version 5.2 Edition, a computerized statistical analysis program (SYSTAT, 1992). Descriptive statistics (e.g., frequencies, means, standard deviations, Pearson product moment correlation coefficients) were calculated for all values of data obtained from scenarios and questionnaires. Testing for significance of behaviors obtained from the above instruments was calculated using t distributions (Roscoe, 1975). T-tests compared superintendents' decision processes with followers' perceptions of them.

C H A P T E R F O U R

DATA ANALYSIS

INTRODUCTION

In the summer of 1994, this researcher was assisted by the Membership Services Division of the Texas Association of School Boards (TASB) in identifying those Texas public school districts which had an Average Daily Attendance (ADA) of 2,500 or more. As mentioned previously in this study, these districts were likely to have a business manager on staff. Two hundred thirty (230) public school districts across the State were identified by TASB as having a sufficient ADA for purposes of this study.

A sample of 230 Texas public school superintendents and 230 Texas public school business managers were sent questionnaires (see Appendix A) which addressed superintendents' decision making roles and processes. Questionnaires with cover letters were mailed on August 15, 1994. Questionnaires and follow-up letters (see Appendix B) were mailed on September 21, 1994, and

October 5, 1994.

Questionnaires were returned by 98 superintendents and 103 business managers. Two superintendent's and 7 business manager's questionnaires were returned unusable and were not tabulated. Ninety-six questionnaires from superintendents and 96 questionnaires from business managers were analyzed for this study.

Background of Participants

A descriptive profile of superintendents and business managers who responded to the questionnaire begins with information about the size of the respondents' school district. Of the superintendents who responded the number of schools in a district ranged from a minimum of 3 to a maximum of 54 while business managers reported 1 to 56 schools. Table 4.1 provides information relevant to school district size.

With respect to the number of elementary schools in a district superintendents reported having a minimum of 2 to maximum of 40. Business managers responded with numbers ranging from 5 to 41. More detail on numbers of elementary schools is provided in Table 4.2.

TABLE 4.1
RESPONDENTS' SCHOOL DISTRICT SIZE

Number of Schools	Superintendents (N = 96) Number Reporting	Percent	Business Managers (N = 96) Reporting	Percent
3	-	-	1	1.04
4	4	4.17	5	5.21
5	8	8.33	13	13.54
6	12	12.50	11	11.46
7	12	12.50	10	10.42
8	10	10.42	11	11.46
9	9	9.38	3	3.12
10	3	3.12	6	6.25
11	4	4.17	3	3.12
12	3	3.12	3	3.12
13	2	2.08	-	-
14	3	3.12	4	4.17
16	-	-	1	1.04
17	2	2.08	5	5.21
19	2	2.08	1	1.04
20	1	1.04	1	1.04
21	1	1.04	-	-
22	1	1.04	1	1.04
25	3	3.12	2	2.08
26	1	1.04	-	-
27	2	2.08	2	2.08
28	2	2.08	1	1.04
29	2	2.08	1	1.04
30	2	2.08	1	1.04
33	-	-	2	2.08
34	1	1.04	2	2.08
35	1	1.04	-	-
36	-	-	1	1.04
40	1	1.04	-	-
42	-	-	1	1.04
43	1	1.04	-	-
45	2	2.08	-	-
47	-	-	1	1.04
50	-	-	1	1.04
54	1	1.04	-	-
55	-	-	1	1.04
56	-		1	1.04

TABLE 4.2
NUMBER OF ELEMENTARY SCHOOLS

Number of Elementary Schools	Superintendents (N = 96) Number Reporting	Superintendents (N = 96) Percent	Business Managers (N = 96) Number Reporting	Business Managers (N = 96) Percent
2	4	4.17	5	5.21
3	9	9.38	17	17.71
4	13	13.54	11	11.46
5	14	14.58	9	9.38
6	16	16.67	15	15.62
7	6	6.25	6	6.25
8	3	3.12	1	1.04
9	1	1.04	2	2.08
10	4	4.17	4	4.17
11	1	1.04	4	4.17
12	1	1.04	–	–
13	2	2.08	1	1.04
15	2	2.08	2	2.08
16	2	2.08	1	1.04
17	2	2.08	2	2.08
18	1	1.04	–	–
19	2	2.08	2	2.08
20	4	4.17	1	1.04
21	1	1.04	1	1.04
22	1	1.04	2	2.08
23	1	1.04	1	1.04
25	1	1.04	1	1.04
26	–	–	2	2.08
27	1	1.04	–	–
28	1	1.04	1	1.04
30	1	1.04	–	–
31	1	1.04	–	–
35	–	–	1	1.04
37	–	–	1	1.04
39	–	–	1	1.04
40	1	1.04	–	–
41	–	–	1	1.04

There was less variation in the number of middle and high schools reported by both groups. For superintendents, the number of middle schools ranged from 1 to 10 while for business managers, the reported range was 1 to 12 middle schools. Superintendents indicated they were responsible for 1 to 6 high schools, and business managers reported an identical distribution. Tables 4.3 and 4.4 provide additional detail on numbers of middle and high schools.

Superintendents and business managers supplied numbers of central office administrators (C.O.A.'s) in the survey. Eleven superintendents reported having 4 C.O.A.'s while 16 said their district had 5. Business managers reported similar numbers: 11 reported having 4 C.O.A.'s; 11 said 5 C.O.A.'s were present; and 11 indicated there were 7 C.O.A.'s in their district. Table 4.5 renders more detail on numbers of central office administrators that respondents reported in this study.

TABLE 4.3
NUMBER OF MIDDLE SCHOOLS

	Superintendents (N = 96)		Business Managers (N = 96)	
Number of Middle Schools	Number Reporting	Percent	Number Reporting	Percent
1	42	43.75	45	46.88
2	24	25.00	14	14.58
3	6	6.25	14	14.58
4	9	9.38	6	6.25
5	1	1.04	-	-
6	5	5.21	6	6.25
7	4	4.17	3	3.12
8	1	1.04	3	3.12
9	2	2.08	3	3.12
10	2	2.08	1	1.04
12	-	-	1	1.04

TABLE 4.4
NUMBER OF HIGH SCHOOLS

	Superintendents (N = 96)		Business Managers (N = 96)	
Number of High Schools	Number Reporting	Percent	Number Reporting	Percent
1	64	66.67	66	68.75
2	16	16.67	20	20.83
3	6	6.25	2	2.08
4	5	5.21	6	6.25
5	4	4.17	1	1.04
6	1	1.04	1	1.04

TABLE 4.5
NUMBER OF CENTRAL OFFICE ADMINISTRATORS

Number of C.O.A.	Superintendents (N = 96) Number Reporting	Percent	Business Managers (N = 96) Number Reporting	Percent
0	7	7.29	7	7.29
1	1	1.04	-	-
2	1	1.04	1	1.04
3	3	3.12	6	6.25
4	11	11.46	11	11.46
5	16	16.67	11	11.46
6	6	6.25	5	5.21
7	9	9.38	11	11.46
8	4	4.17	6	6.25
9	5	5.21	3	3.12
10	6	6.25	3	3.12
11	1	1.04	2	2.08
12	4	4.17	2	2.08
13	1	1.04	1	1.04
14	1	1.04	1	1.04
15	2	2.08	1	1.04
16	1	1.04	3	3.12
17	-	-	2	2.08
18	-	-	1	1.04
20	3	3.12	2	2.08
25	2	2.08	1	1.04
30	1	1.04	4	4.17
32	1	1.04	-	-
35	1	1.04	-	-
39	-	-	1	1.04
40	1	1.04	-	-
41	1	1.04	-	-
42	-	-	1	1.04

C.O.A. -- Central Office Administrators

TABLE 4.5 (cont'd.)
NUMBER OF CENTRAL OFFICE ADMINISTRATORS

Number of C.O.A.	Superintendents (N = 96) Number Reporting	Percent	Business Managers (N = 96) Number Reporting	Percent
44	-	-	1	1.04
45	-	-	1	1.04
46	1	1.04	-	-
47	-	-	1	1.04
50	1	1.04	3	3.12
52	1	1.04	-	-
62	1	1.04	-	-
70	1	1.04	-	-
75	-	-	1	1.04
100	-	-	2	2.08
110	1	1.04	1	1.04
123	1	1.04	-	-

C.O.A. -- Central Office Administrators

Table 4.6 yields mean, variance, and standard deviation data on respondents' school districts' size. Superintendents and business managers reported slightly more than 13 schools in their respective districts. As groups, they were farther apart on numbers of central office administrators (C.O.A.'s) with superintendents reporting a mean of 13.59 C.O.A.'s and business managers--15.17 C.O.A.'s present in their district.

TABLE 4.6
RESPONDENTS' SCHOOL DISTRICT SIZE

Superintendents
(N = 96)

	Mean	Variance	Standard Deviation
T. Num. Schools	13.66	119.70	10.94
Elem. Schools	9.33	59.76	7.73
Middle Schools	2.64	5.22	2.29
High Schools	1.67	1.38	1.18
C.O.A.	13.59	407.65	20.19

Business Managers
(N = 96)

	Mean	Variance	Standard Deviation
T. Num. Schools	13.51	142.13	11.92
Elem. Schools	9.25	77.62	8.81
Middle Schools	2.80	6.43	2.54
High Schools	1.53	1.01	1.01
C.O.A.	15.17	448.08	21.17

Superintendents and Business Managers Combined
(N = 192)

	Mean	Variance	Standard Deviation
T. Num. Schools	13.58	130.23	11.41
Elem. Schools	9.29	68.33	8.27
Middle Schools	2.72	5.81	2.41
High Schools	1.60	1.19	1.09
C.O.A.	14.38	426.25	20.65

T. Num. Schools -- Total Number of Schools
Elem. Schools -- Elementary Schools
C.O.A. -- Central Office Administrators

In Table 4.7, data describing how many years since a building program had been experienced in a respondents' district is given. Of 96 superintendents and business managers who responded to the survey the great majority indicated that school facilities were currently under construction in their district. Fifty-seven superintendents and 53 business managers said it had been "0" years since they had erected a building meaning they were currently involved in construction.

Information on the number of position: held either as a superintendent or as business manager is contained in Table 4.8. Most superintendents (39 out of 96 surveyed) reported holding only one superintendency while most business managers (53 out of 96 surveyed) said they had held only one business manager's position. Thirty-one superintendents indicated they had held at least 2 superintendencies.

TABLE 4.7
YEARS SINCE HAVING A BUILDING PROGRAM

Number of Years	Superintendents (N = 96) Number Reporting	Percent	Business Managers (N = 96) Number Reporting	Percent
0	57	59.38	53	55.21
1	15	15.62	14	14.58
2	6	6.25	5	5.21
3	7	7.29	3	3.12
4	3	3.12	2	2.08
5	3	3.12	3	3.12
6	5	5.21	2	2.08
7	-	-	5	5.21
8	-	-	4	4.17
11	-	-	1	1.04
12	-	-	1	1.04
13	-	-	1	1.04
25	-	-	1	1.04
29	-	-	1	1.04

	Superintendents (N = 96)	Business Managers (N = 96)	Combined (N=192)
Mean	1.09	2.34	1.72
Variance	3.05	22.25	12.98
S. Deviation	1.75	4.72	3.60

S. Deviation -- Standard Deviation

TABLE 4.8
NUMBER OF PROFESSIONAL POSITIONS HELD

Superintendents
(N = 96)

Number of Superintendent Positions Held	Number Reporting	Percent
0	2	2.08
1	39	40.62
2	31	32.29
3	16	16.67
4	7	7.29
5	1	1.04

Business Managers
(N = 96)

Number of Business Manager Positions Held	Number Reporting	Percent
0	3	3.12
1	53	55.21
2	27	28.12
3	8	8.33
4	2	2.08
5	1	1.04
6	2	2.08

	Mean	Variance	Standard Deviation
N. S. P. H.	1.90	1.04	1.02
N. B. M. P. H.	1.63	1.14	1.07
S.& B. M. C.	.96	1.42	1.19

N. S. P. H. -- Number of Superintendent Positions Held
N. B. M. P. H. -- Number of Business Manager Positions Held
S. & B. M. C. -- Superintendents and Business Managers Combined

In Tables 4.9, 4.10, 4.11, 4.12, and 4.13, data are given on respondents' age, years of professional experience, educational preparation, gender, and ethnicity respectively. Table 4.14 gives a summary of the above categories in terms of means, variances, and standard deviations. The mean age for superintendents who responded to the survey was 49.83 years while for business managers the average age was 46.60. Superintendents reported slightly less experience (8.98 years) in their position than did business managers (9.55 years). With respect to educational preparation, 42 superintendents reported having Ph.D.'s while only 4 business managers had achieved the same level of educational development. No superintendents were certified public accountants while 19 business managers were. Eighty-nine superintendents were male; 7 were female. Eighty-four business managers were male; 12 were female.

Eighty-four superintendents were Anglo; 7 were Hispanic; 1 was Afro-American, and 4 were Native American. Eighty-one business managers were Anglo; 10 were Hispanic; 1 was Afro-American, and 4 were Native American.

TABLE 4.9
RESPONDENTS' AGE

Age	Superintendents (N = 96) Number Reporting	Percent	Business Managers (N = 96) Number Reporting	Percent
N/R	1	1.04	1	1.04
29	-	-	2	2.08
34	-	-	2	2.08
35	-	-	1	1.04
36	-	-	2	2.08
37	-	-	4	4.17
38	1	1.04	1	1.04
39	-	-	2	2.08
40	2	2.08	4	4.17
41	4	4.17	2	2.08
42	-	-	7	7.29
43	6	6.25	2	2.08
44	1	1.04	5	5.21
45	1	1.04	3	3.12
46	7	7.29	6	6.25
47	8	8.33	4	4.17
48	7	7.29	9	9.38
49	6	6.25	6	6.25
50	5	5.21	4	4.17
51	7	7.29	3	3.12
52	5	5.21	3	3.12
53	6	6.25	2	2.08
54	5	5.21	7	7.29
55	5	5.21	2	2.08
56	4	4.17	3	3.12
57	5	5.21	1	1.04
58	5	5.21	2	2.08
59	4	4.17	1	1.04
60	-	-	1	1.04
61	-	-	1	1.04
62	1	1.04	3	3.12

N/A -- Not Reported

TABLE 4.10
YEARS OF PROFESSIONAL EXPERIENCE

Number of Years of Experience	Superintendents (N = 96) Number Reporting	Percent	Business Managers (N = 96) Number Reporting	Percent
0	1	1.04	1	1.04
1	8	8.33	7	7.29
2	3	3.12	3	3.12
3	7	7.29	5	5.21
4	4	4.17	4	4.17
5	8	8.33	12	12.50
6	9	9.38	11	11.46
7	4	4.17	5	5.21
8	7	7.29	5	5.21
9	4	4.17	4	4.17
10	6	6.25	6	6.25
11	7	7.29	3	3.12
12	3	3.12	4	4.17
13	3	3.12	-	-
14	6	6.25	2	2.08
15	3	3.12	5	5.21
16	3	3.12	1	1.04
17	1	1.04	3	3.12
18	2	2.08	2	2.08
19	2	2.08	2	2.08
20	-	-	2	2.08
21	1	1.04	2	2.08
22	2	2.08	1	1.04
23	1	1.04	3	3.12
25	-	-	1	1.04
26	-	-	1	1.04
27	-	-	1	1.04
29	1	1.04	-	-

TABLE 4.11
RESPONDENTS' EDUCATIONAL PREPARATION

	Superintendents (N = 96)		Business Managers (N = 96)	
Educational Preparation	Number Reporting	Percent	Number Reporting	Percent
N/R	-	-	4	4.17
B.A. Degree	-	-	14	14.58
Ed. Special.	29	30.21	-	-
M.A. Degree	23	23.96	50	52.08
CPA	-	-	19	19.79
Ed.D.	2	2.08	5	5.21
Ph.D.	42	43.75	4	4.17

N/R -- Not Reported
B.A. Degree -- Bachelor of Arts Degree
Ed. Specialist -- Education Specialist
M.A. Degree -- Master of Arts Degree
CPA -- Certified Public Accountant
Ed.D. -- Doctor of Education
Ph.D. -- Doctor of Philosophy

TABLE 4.12
RESPONDENTS' GENDER

	Superintendents (N = 96)		Business Managers (N = 96)	
Gender	Number Reporting	Percent	Number Reporting	Percent
Female	7	7.29	12	12.50
Male	89	92.71	84	87.50

TABLE 4.13
RESPONDENTS' ETHNICITY

	Superintendents (N = 96)		Business Managers (N = 96)	
Ethnicity	Number Reporting	Percent	Number Reporting	Percent
Anglo	84	87.50	81	84.38
Hispanic	7	7.29	10	10.42
Afro-American	1	1.04	1	1.04
Native American	4	4.17	4	4.17

TABLE 4.14
BIOGRAPHICAL DATA SUMMARY

Superintendents
(N = 96)

	Mean	Variance	Standard Deviation
Age	49.83	54.75	7.40
Years of Exp.	8.98	35.18	5.93
Ed. Preparation	4.56	2.31	1.52
Gender	1.93	0.07	0.26
Ethnicity	1.22	0.45	0.67

Business Managers
(N = 96)

	Mean	Variance	Standard Deviation
Age	46.60	75.97	8.72
Years of Exp.	9.55	45.11	6.72
Ed. Preparation	2.29	22.25	4.72
Gender	1.88	0.11	0.33
Ethnicity	1.25	0.46	0.68

Superintendents and Business Managers Combined
(N = 192)

	ean	Variance	Standard Deviation
Age	-8.22	67.64	8.22
Years of Exp.	4.50	37.69	6.14
Ed. Preparation	3.43	3.23	1.80
Gender	1.91	0.09	0.30
Ethnicity	1.23	0.45	0.67

Years of Exp. --- Years of Experience
Ed. Preparation --- Educational Preparation

Decision Frequencies, Means, Variances Standard Deviations and Correlation Coefficients

Tables 4.15 and 4.16 provide information on the frequency of the kinds of decisions superintendents and business managers make when they're involved in planning and building of school facilities. Means, variances, and standard deviations calculated for decisional data and found in Tables 4.17 and 4.18 further describe decision processes superintendents and business managers use in planning for school facilities. It is evident from the data that in the majority of cases, information was shared with staff in a group setting with a number of decisions reached by consensus.

Table 4.19 follows with information on the relationship of survey correspondents to questionnaire items as determined by Pearson's product moment correlation coefficients. Few significant correlation coefficients were found in the data. The most robust correlation identified from responses to the 20 item scenario was found to be 0.282 which is statistically significant at the .05 level using the t distribution.

Table 4.20 completes the series of tables in this

chapter. In this table are found planning process phase definitions which explain abbreviations found in earlier tables.

TABLE 4.15
SUPTS.' AND BUS. MANS.' DECISION STYLES FREQUENCIES

Planning Process Phases	Supts.' Responses (N = 96) Decision Processes 0	1	2	3	4	5	Bus. Mans.' Responses (N = 96) Decision Processes 0	1	2	3	4	5
NAP1	.1	28	2	7	22	36	-	29	7	13	23	24
NAP2	2	9	9	14	26	36	-	12	9	19	28	28
NAP3	3	25	5	22	13	28	-	40	14	16	15	11
NAP4	-	4	1	5	12	74	-	5	4	6	20	61
DP5	1	19	18	19	16	23	-	9	10	38	18	21
DP6	-	15	6	13	22	40	-	21	16	23	21	13
DP7	-	8	7	19	22	40	-	11	13	23	25	24
SP8	-	10	6	7	23	50	-	14	13	8	24	37
SP9	-	11	4	5	19	57	1	8	7	15	26	39
SP10	-	3	2	9	21	61	1	10	4	9	20	52
FP11	-	18	18	23	18	19	-	22	14	32	13	15
FP12	-	9	15	28	22	22	1	8	13	39	16	19
FP13	-	2	7	10	29	48	-	7	9	13	33	34
CP14	-	39	12	17	11	17	-	33	12	27	12	12
CP15	-	29	15	24	11	17	-	29	10	33	10	14
OP16	-	2	7	8	19	60	-	4	7	20	23	42
OP17	-	6	2	9	14	65	-	6	4	13	23	50
EP18	-	8	3	13	22	50	-	7	4	32	16	37
EP19	-	11	4	21	23	37	-	10	8	35	17	26
EP20	17	7	3	8	19	42	22	6	5	12	18	33

Planning Process Phases: See Table 4.20 on page 134.
Decision Processes:
- 0 -- No response
- 1 -- Completely autocratic decision making
- 2 -- Obtains information from staff, then makes decision himself/herself
- 3 -- Shares problem with each staff member individually, then makes a decision that may or may not reflect staff's influence
- 4 -- Shares problem with staff as a group, then makes a decision that may or may not reflect staff's influence
- 5 -- Completely consensual decision making

TABLE 4.16
SUPTS.' AND BUS. MANS.' DECISION STYLES PERCENTAGES

Planning Process Phases	Supts.' Responses (N = 96) Decision Processes 0	1	2	3	4	5	Bus. Mans.' Responses (N = 96) Decision Processes 0	1	2	3	4	5
NAP1	1	29	2	7	23	38	-	30	7	14	24	25
NAP2	2	9	9	15	27	38	-	13	9	20	29	29
NAP3	3	26	5	23	14	29	-	42	15	17	16	12
NAP4	-	4	1	5	13	77	-	5	4	6	21	64
DP5	1	20	19	20	17	24	-	9	10	40	19	22
DP6	-	16	6	14	23	42	-	22	19	24	22	14
DP7	-	8	7	20	23	42	-	12	14	24	26	25
SP8	-	10	6	7	24	52	-	15	14	8	25	39
SP9	-	12	4	5	20	59	1	8	7	16	27	41
SP10	-	3	2	9	22	64	1	10	4	9	21	54
FP11	-	19	19	24	19	20	-	23	15	33	14	16
FP12	-	10	16	29	23	23	1	8	14	41	17	20
FP13	-	2	7	10	30	50	-	7	9	14	34	35
CP14	-	41	13	18	12	18	-	34	13	28	13	13
CP15	-	30	16	25	12	18	-	30	10	34	10	15
OP16	-	2	7	8	20	63	-	4	7	21	24	44
OP17	-	6	2	9	15	68	-	6	4	14	24	52
EP18	-	8	3	14	23	52	-	7	4	33	17	39
EP19	-	12	4	22	24	39	-	10	8	37	18	27
EP20	18	7	3	8	20	44	23	6	5	13	19	34

Planning Process Phases: See Table 4.20 on page 134.
Decision Processes:
- 0 -- No response
- 1 -- Completely autocratic decision making
- 2 -- Obtains information from staff, then makes decision himself/herself
- 3 -- Shares problem with each staff member individually, then makes a decision that may or may not reflect staff's influence
- 4 -- Shares problem with staff as group, then makes a decision that may or may not reflect staff's influence
- 5 -- Completely consensual decision making

TABLE 4.17
SUPTS.' AND BUS. MANS.' DECISION STYLES
CALCULATION OF MEANS, VARIANCES, AND STANDARD DEVIATIONS

Planning Process Phases	Supts.' Responses (N = 96) Mean	Variance	S.D.	Bus. Mans.' Responses (N = 96) Mean	Variance	S.D.
NAP1	3.34	2.92	1.71	3.06	2.54	1.60
NAP2	3.68	1.99	1.41	3.53	1.79	1.34
NAP3	3.05	2.70	1.64	2.41	2.10	1.45
NAP4	4.57	0.92	0.96	4.33	1.24	1.11
DP5	3.03	2.22	1.49	3.33	1.45	1.20
DP6	3.69	2.13	1.46	2.87	1.82	1.35
DP7	3.82	1.64	1.28	3.40	1.72	1.31
SP8	4.01	1.80	1.34	3.59	2.18	1.48
SP9	4.12	1.85	1.36	3.81	1.75	1.32
SP10	4.41	0.94	0.97	4.01	1.93	1.39
FP11	3.02	1.94	1.39	2.84	1.82	1.35
FP12	3.34	1.58	1.26	3.59	11.87	3.45
FP13	4.19	1.06	1.03	3.81	1.50	1.23
CP14	2.53	2.38	1.54	2.56	1.95	1.40
CP15	2.71	2.13	1.46	2.69	1.92	1.39
OP16	4.33	1.09	1.04	3.96	1.33	1.15
OP17	4.35	1.31	1.14	4.12	1.39	1.18
EP18	4.07	1.54	1.24	3.75	1.50	1.22
EP19	3.74	1.75	1.32	3.43	1.60	1.26
EP20	3.37	3.77	1.94	3.01	3.97	1.99

Planning Process Phases: See Table 4.20 on page 134.
S.D. -- Standard Deviation

TABLE 4.18
SUPTS.'AND BUS. MANS.' DECISION STYLES
CALCULATION OF MEANS, VARIANCES, AND STANDARD DEVIATIONS

Supts.' and Bus. Mans.' Responses Combined
(N = 192)

Planning Process Phases	Mean	Variance	Standard Deviation
NAP1	3.20	2.74	1.66
NAP2	3.60	1.88	1.37
NAP3	2.73	2.49	1.58
NAP4	4.45	1.09	1.04
DP5	3.18	1.85	1.36
DP6	3.28	2.14	1.46
DP7	3.61	1.72	1.31
SP8	3.80	2.02	1.42
SP9	3.96	1.82	1.35
SP10	4.21	1.46	1.21
FP11	2.93	1.88	1.37
FP12	3.31	1.47	1.21
FP13	4.00	1.31	1.14
CP14	2.55	2.16	1.47
CP15	2.70	2.01	1.42
OP16	4.15	1.24	1.11
OP17	4.23	1.35	1.16
EP18	3.91	1.54	1.24
EP19	3.58	1.69	1.30
EP20	3.19	3.88	1.97

Planning Process Phases: See Table 4.20 on page 134.

TABLE 4.19
Relationship of Respondents to Questionnaire Items as Determined by Pearson's Product Moment Correlation Coefficient

Questionnaire Items	Correlation Coefficient
NAP1	-0.085
NAP2	-0.053
NAP3	-0.205
NAP4	-0.115
DP5	0.111
DP6	-0.282
DP7	-0.163
SP8	-0.147
SP9	-0.112
SP10	-0.164
FP11	-0.065
FP12	-0.030
FP13	-0.164
CP14	0.011
CP15	-0.007
OP16	-0.169
OP17	-0.103
EP18	-0.131
EP19	-0.121
EP20	-0.090
# of Schs.	-0.006
# of Elem. Schs.	-0.005
# of Mid. Schs.	0.035
# of High Schs.	-0.062
# of Cent. Off. Adm.	0.038
Yrs. Sin. Bldg. Pro.	0.174
Ed. Preparation	-0.633
Yrs. Superintendent	-0.732
Yrs. Bus. Manager	0.711
Supt. Pos. Held	-0.788
Bus. Man. Pos. Held	0.734
Age	-0.197
Gender	-0.087
Ethnicity	0.023

Planning Process Phases: See TABLE 4.20 on page 134.
# = Number
Schs. = Schools
Elem. Schs. = Elementary Schools

TABLE 4.19 (cont'd.)
Relationship of Respondents to Questionnaire Items as Determined by Pearson Product Moment Correlation Coefficient

---

Mid. Schs. = Middle Schools
Cent. Off. Adm. = Central Office Administrators
Yrs. Sin. Bldg. Pro. = Years Since Building Program
Ed. = Educational
Bus. = Business
Supt. Pos. = Superintendent Positions
Man. Pos. = Manager Positions

TABLE 4.20
PLANNING PROCESS PHASE DEFINITIONS

Needs Assessment Phase (NAP)

NAP1: Involve local citizens in an advisory planning role for the new facility.

NAP2: Develop a time-table to be used as a basis for planning.

NAP3: Select an architect by reviewing school building plans by various architects.

NAP4: Develop educational specifications for the new building.

Design Phase (DP)

DP5: Investigate latest federal and state laws relating to usage of building by handicapped persons.

DP6: Name a committee to interview representatives from three architectural firms.

DP7: Work with city council in developing adjacent property to school site for possible public park.

Selling Phase (SP)

SP8: Broaden citizen involvement in the building project.

SP9: Stress to the public, in communicating educational specifications, that the needs assessment and the educational program are the only justification for the new school.

SP10: Include open houses, displays in local businesses, clips on local radio and television stations, articles in local newspapers, and presentations made in local service clubs to persuade the public of the need for a new school.

Financing Phase (FP)

FP11: Recommend to the board the hiring of a financial consultant to assist with planning.

FP12: Explore several alternative methods of financing the new school.

FP13: Recommend to the board the passage of a bond issue to finance construction of school.

TABLE 4.20 (cont'd.)
PLANNING PROCESS PHASE DEFINITIONS

Construction Phase (CP)

CP14: Schedule visits to the building site with the architect to ensure building specifications are being met.

CP15: Meet with architect to determine whether all building codes and other specifications are being met during construction.

Occupation Phase (OP)

OP16: Move teachers and students into new building after moving educational materials and provide orientation to students.

OP17: Involve parents and members of the community in the opening of the new facility.

Evaluation Phase (EP)

EP18: Evaluate adequacy of the learning environment and safety.

EP19: Evaluate how well the architect adhered to design, reporting and construction schedules.

EP20: Begin a process of continuous evaluation based on actual usage of the building by notating those items that need to be improved in a district design specifications document that would be shared with the architect of the district's next building project.

Summary of Results

Analysis of questionnaires yielded descriptive data which provided responses, in part, to the following research questions:

1) When superintendents make decisions concerning planning of school facilities, to what extent do these decisions follow the Vroom-Yetton Model?

As indicated by data in Tables 4.15 and 4.16, over 70 % of the time decisions made by superintendents during the various planning phases reflected involvement of staff in the process. This result would support a basic assumption of the model that participation increases decision acceptance.

2) To what extent do business managers verify decisional characteristics employed by superintendents in educational facility planning?

The application of statistical measures to survey data yielded few significant differences between groups

indicating that business managers perceived rather well how superintendents would make school facility decisions.

Twenty scenario items generated frequency data that indicated superintendents shared most facility decisions with others often employing consensus to, possibly, ensure quality and acceptance of decisions. Only in scheduling visits to the building site with the architect to ensure building specifications were being followed (CP14 in Table 4.20) and in deciding to meet with the architect to determine whether all building codes and other specifications were being followed during construction (CP15 in Table 4.20) were superintendents more autocratic than participative.

Although business managers often responded similarly to superintendents as a group, they perceived superintendents as being more autocratic than participative in making decisions about involving local citizens in an advisory planning role for the new facility (NAP1 in Table 4.20) and in considering an architect for the new building by reviewing school building plans by various architects at the annual joint meeting of the Texas Association of School

Administrators and Texas Association of School Boards (NAP3 in Table 4.20).

Application of means, variance, and standard deviation statistics to data derived from the 20 item scenario yielded few significant differences within and between groups suggesting once more that business managers perceived quite well how superintendents would respond to school facility decisions.

Pearson's product moment correlation coefficients were derived to determine to what extent a correlation existed between administrative positions of superintendents and business managers and responses to items 1 through 20. Not surprisingly, few significant correlation coefficients were found. As an example, the most robust correlation identified with respect to the 20 item scenario and questionnaire participants' responses to the items was found to be 0.282 which is statistically significant at the .05 level ($P<.05$, $df=190$) using the t distribution. The educational, practical, or functional meaning of this obtained coefficient indicates that only 7.8% of the variance between administrative position and responses to item DP6 (Table 4.20) was common and overlapping. From a

statistician's point of view, this finding would support in general that no practical or functional relationship existed between administrative positions of superintendents and business managers and responses to items on a decision making roles and processes survey. From the standpoint of the school practitioner, an analysis of obtained coefficients of survey items indicated that among survey respondents business managers perceived quite well the extent to which superintendents would involve others in making decisions about educational facilities.

C H A P T E R 5

SUMMARY AND CONCLUSIONS

IMPLICATIONS FOR PRACTICE

Questionnaire results indicate superintendents engage in a high degree of participative decision making during the various stages of school facility acquisition. It may be due to the technical nature of school facility planning and/or the desire on the part of Texas public school CEO's to achieve a decision of quality and one that will be afforded a high degree of acceptance by students, staff, and community patrons that superintendents involve others in the process.

Earlier in this study, it was noted that skills deemed necessary for effective superintending included: 1) demonstrating a broad array of leadership skills; 2) employing sound financial planning and cash flow management; 3) employing effective school/community relations and coalition building; 4) utilizing motivation techniques; and 5) guiding facility planning, maintenance, and operations. All of the above

relate in varying degrees to decision making in educational facility planning. It is through recognition and refinement of these skills, often within a consultative or group decision framework, that improvement in the process of superintending may be realized.

Superintendents who endeavor to bring expertise to the school facilities decision process would benefit from integrating the Vroom-Yetton Normative Model of Decision Making into the undertaking. Increasing participation of staff in decision making involving school facilities may enhance decision quality and acceptance. Better decisions stand to raise the performance of the entire organization.

Involving others in the decision process utilizes a tenet of transformational leadership. When superintendents move from an autocratic to participative administrative style they are more likely to listen to and be guided by others. They may become interdependent, e.g., to have enough independence to be creative without repudiating the external influences that stimulate growth and significance. A superintendent who involves others in decision making

when planning for school facilities has the opportunity to improve the process resulting in better decisions which may impact the district in various ways for years to come.

SUGGESTIONS FOR FURTHER STUDY

Potentially, a wide variety of studies of decision making roles and processes of superintendents and other school administrators is possible. Decision making in personnel administration, fiscal planning, curriculum design, instructional delivery systems, effective school/community relations, and determining local reliable performance measures for instructional outcomes would name several areas worthy of study.

Investigation into decision making processes involving effective evaluation of teacher performance, maintenance and operation of school facilities, student or personnel conflict mediation, development of school board policies, improving the quality of relationships among staff and students to enhance learning, collaborative goal setting and action planning, politics of school governance and operations, evaluation of

administrator and supervisor performance, development of interpersonal communications skills offer additional areas where study is viable.

As it may be noted in the above, a vast number of subjects may be investigated. From the standpoint of this study, several areas warrant expanded investigation. Using the Vroom-Yetton Normative Model as a cornerstone, are Texas superintendents as participative as public school superintendents nationally? How do other school administrators compare to business managers in perceiving how their superintendents will make decisions in other or related areas of administrative responsibility? Is there more or less participation in decision making when school district size, e.g., average daily attendance, is not a factor?

Further investigation into decision making practices of Texas public school superintendents stands to enhance the quality of educational services provided to our public school children. It is up to the future researcher to determine which domain is most in need of analysis.

A P P E N D I X A

Cover Letter with Scenarios and Questionnaires

COLLEGE OF EDUCATION
THE UNIVERSITY OF TEXAS AT AUSTIN

Department of Educational Administration · Education Building 310 · Austin, Texas 78712-1291
(512) 471-7551 · FAX: (512) 471-5975

TO: Texas School Superintendent or Business Manager Addressed

SUBJECT: Survey: Decision Making Roles and Processes

FROM: Dr. Michael P. Thomas, Jr. and Dr. Howard Balanoff
Department of Educational Administration

DATE: July 11, 1994

This is to request your cooperation in a study of the decision making roles and processes of Texas school superintendents by James M. Ross who is currently assistant business manager at the Mission Consolidated I.S.D. We feel that this study will contribute to our understanding of the way school superintendents make decisions about the factors involved in school facilities.

We appreciate your willingness to cooperate in this study. Included for your convenience is a stamped return envelope. Also, for your information, Mr. Ross's phone and fax numbers are as follows:

210/580-5545 (work)
210/580-5526 (work)
210/585-8295 (home)
210/280-5523 (FAX)

Again, your attention and response is greatly appreciated.

Sincerely yours,

Dr. Michael Thomas, Jr.
Associate Dean, School of Education
Graduate Advisor
Dissertation Comm. Member

Sincerely yours,

Dr. Howard Balanoff
Adjunct Professor
Dissertation Comm. Co-chair

DECISION-MAKING PROCESSES OF THE SUPERINTENDENT

Scenario and Questionnaire to be Administered to

Superintendents and Business Managers

This scenario and questionnaire is part of a research study of the superintendency. The goal of this part of the study is to better understand the decision-making roles and processes of Texas superintendents and business managers' perceptions of these processes. NOTE: A copy of this scenario/questionnaire has been mailed to your district's Ass't. Supt. for Business or Business Manager.

This is not a study of individuals or individual school districts but of superintendents as a group. The scenario/questionnaire is numbered in order to assist in the organization of the study, analysis of the data, and to allow for follow-up mailings. Individual responses will be held in strict confidence.

On the following pages you will find various items. Specific questions are given for each section. Please remember: questions are designed to obtain your perceptions of various areas that relate to decision-making.

There are no trick questions nor are there right and wrong responses. Please answer honestly and candidly. Thank you for your participation and cooperation.

Check the box if you would like to receive a brief report of the findings. If you want to compare your individual responses to the larger sample findings, please make yourself a copy of this instrument.

SCENARIO I

(For the Superintendent)

PART I

I. Decision Processes

Directions: The following section presents the types of decision processes a chief executive uses in administrative activities. Please review processes before going on to Part II.

1. The superintendent solves the problem or makes the decision by him/herself, using information available to him/her at the time.

2. The superintendent obtains the necessary information from his/her staff, then decides on the solution to the problem him/herself. The superintendent may or may not tell his/her staff what the problem is in getting the information from them. The role played by the staff in making the decision is clearly one of

providing the necessary information to him/her, rather than generating or evaluating alternative solutions.

3. The superintendent shares the problem with relevant staff individually, getting their ideas and suggestions without bringing them together as a group. Then he/she makes the decision that may or may not reflect his/her staff's influence.

4. The superintendent shares the problem with his/her staff as a group, collectively obtaining their ideas and suggestions. Then he/she makes the decision that may or may not reflect his/her staff's influence.

5. The superintendent shares a problem with his/her staff as a group. Together he/she and staff generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. The superintendent's role is much like that of chairman. He/she does not try to influence the group to adopt "his/her" solution and he/she is willing to accept and implement any solution that has the support of the entire group.

PART II

II. Scenario With Questionnaire

Directions: FOR THE SUPERINTENDENT: Please read the scenario and respond to the questionnaire that follows by writing number (from Part I) of the decision process that your superintendent, in your opinion, would most likely use in solving the problem or completing the task.

Recent population growth in La Lomita ISD has necessitated consideration of a new K-6 elementary school by the local board of trustees. The board subsequently directed the superintendent of schools to initiate a planning process which would ensure successful completion of the new building within eighteen to twenty-four months. The superintendent

determined that his planning process would involve seven general phases:

A) Needs Assessment Phase

B) Design Phase

C) "Selling" Phase

D) Financing Phase

E) Construction Phase

F) Occupation Phase

G) Evaluation Phase

What processes did you use through the different phases? Write the number of the decision procedure from Part I that best explains the your decision-making process in the blank in front of the number of statements that follow:

Needs Assessment Phase

_____1. Decision: to involve local citizens in an advisory planning role for the new facility.

_____2. Decision: to develop a time-table to be used as a basis for planning, to help keep building program on schedule.

_____3. In considering an architect for the new building, a decision was made to visit the Texas Association of School Administrators and Texas Association of School Boards joint annual convention held in Houston in September to review school building plans by various architects.

_____4. Decision: to develop educational specifications for the new building.

Design Phase:

_____5. Decision: to investigate latest federal and state laws relating to usage of building by handicapped persons.

_____6. Decision: to name a committee to interview representatives from three architectural firms (in selecting an architect).

_____7. Decision: to work with city council in developing adjacent property to school site for possible public park.

Selling Phase:

_____8. Decision: to broaden citizen involvement in the building project.

_____9. Decision: to stress to the public, in communicating educational specifications, that the needs assessment and the educational program are the <u>only</u> justification for the new school.

____10. Decision: to include open houses, displays in local businesses, clips on local radio and television stations, articles in local newspapers, and presentations made in local service clubs to persuade the public of the need for a new school.

Financing Phase:

____11. Decision: to recommend to the board the hiring of an outside financial consultant to assist with fiscal planning.

____12. Decision: to explore several alternative methods of financing the new school.

____13. Decision: to recommend to the board the passage of a bond issue to finance construction of the new building.

Construction Phase:

____14. Decision: to schedule visits to the building site with the architect to ensure building specifications are being followed.

____15. Decision: to meet with architect to determine whether all building codes and other specifications are being followed during construction.

Occupation Phase:

_____16. Decision: to move teachers and students into new building after moving furniture, equipment, and other materials and after providing an orientation to students on the kind of instructional program (educational specifications) the building was designed to facilitate.

_____17. Decision: to involve parents and other members of the community in the opening of the new facility through open houses and the like.

Evaluation Phase:

_____18. Decision: to evaluate adequacy of the learning environment and safety, such as, heating and cooling, lighting, ventilation, color and texture schemes, evacuation patterns, slick floor areas, etc.

_____19. Decision: to evaluate how well the architect adhered to design, reporting, and construction schedules.

____20. Decision: to begin a process of continuous evaluation based on actual usage of the building by notating those items that need to be improved in a district design specifications document that would be shared with the architect of the district's next building project.

Please complete this last section of biographical data.

I. District Setting

Number of schools:

Elementary _____ Middle or Junior High _____

High Schools _____

Number of central office administrators _____

How long has it been since you've been involved in a building program?_____

II. Superintendent preparation and experience

Check only the highest degree received: Master's____

Ed. Specialist____ Ed.D____ Ph.D____

Number of years you have been a superintendent:_____

Number of superintendencies you have held including the present one: _____

Your age on your last birthday: ____

Your sex: Female _____ Male ____

Your ethnic background: White ____ Hispanic ____

Afro-American ____ Native American ____

Thank you for completing this survey!

Please place it in the stamped envelope and mail at your earliest convenience.

SCENARIO II

(For the business manager)

PART I

I. Decision Processes

Directions: The following section presents the types of decision processes a chief executive uses in administrative activities. Please review processes before going on to Part II.

1. The superintendent solves the problem or makes the decision by him/herself, using information available to him/her at the time.

2. The superintendent obtains the necessary information from his/her staff, then decides on the solution to the problem him/herself. The superintendent may or may not tell his/her staff what the problem is in getting the information from them. The role played by the staff in making the decision is clearly one of

providing the necessary information to him/her, rather than generating or evaluating alternative solutions.

3. The superintendent shares the problem with relevant staff individually, getting their ideas and suggestions without bringing them together as a group. Then he/she makes the decision that may or may not reflect his/her staff's influence.

4. The superintendent shares the problem with his/her staff as a group, collectively obtaining their ideas and suggestions. Then he/she makes the decision that may or may not reflect his/her staff's influence.

5. The superintendent shares a problem with his/her staff as a group. Together he/she and staff generate and evaluate alternatives and attempt to reach agreement (consensus) on a solution. The superintendent's role is much like that of chairman. He/she does not try to influence the group to adopt "his/her" solution and he/she is willing to accept and implement any solution that has the support of the entire group.

PART II

II. Scenario With Questionnaire

Directions: FOR THE BUSINESS MANAGER: Please read the scenario and respond to the questionnaire that follows by writing number (from Part I) of the decision process that your superintendent, in your opinion, would most likely use in solving the problem or completing the task.

Recent population growth in La Lomita ISD has necessitated consideration of a new K-6 elementary school by the local board of trustees. The board subsequently directed the superintendent of schools to initiate a planning process which would ensure successful completion of the new building within eighteen to twenty-four months. The superintendent

determined that his planning process would involve seven general phases:

A) Needs Assessment Phase

B) Design Phase

C) "Selling" Phase

D) Financing Phase

E) Construction Phase

F) Occupation Phase

G) Evaluation Phase

What processes did the superintendent use through the different phases? Write the number of the decision procedure from Part I that best explains the superintendent's decision-making process in the blank in front of the number of statements that follow:

Needs Assessment Phase

_____1. Decision: to involve local citizens in an advisory planning role for the new facility.

_____2. Decision: to develop a time-table to be used as a basis for planning, to help keep building program on schedule.

_____3. In considering an architect for the new building, a decisn was made to visit the Texas Association of School Administrators and Texas Association of School Boards joint annual convention held in Houston in September to review school building plans by various architects.

_____4 Decision: to develop educational specifications for the new building.

Design Phase:

_____5. Decision: to investigate latest federal and state laws relating to usage of building by handicapped persons.

_____6. Decision: to name a committee to interview representatives from three architectural firms (in selecting an architect).

_____7. Decision: to work with city council in developing adjacent property to school site for possible public park.

Selling Phase:

_____8. Decision: to broaden citizen involvement in the building project.

_____9. Decision: to stress to the public, in communicating educational specifications, that the needs assessment and the educational program are the only justification for the new school.

____10. Decision: to include open houses, displays in local businesses, clips on local radio and television stations, articles in local newspapers, and presentations made in local service clubs to persuade the public of the need for a new school.

Financing Phase:

____11. Decision: to recommend to the board the hiring of an outside financial consultant to assist with fiscal planning.

____12. Decision: to explore several alternative methods of financing the new school.

____13. Decision: to recommend to the board the passage of a bond issue to finance construction of the new building.

Construction Phase:

____14. Decision: to schedule visits to the building site with the architect to ensure building specifications are being followed.

____15. Decision: to meet with architect to determine whether all building codes and other specifications are being followed during construction.

Occupation Phase:

____16. Decision: to move teachers and students into new building after moving furniture, equipment, and other materials and after providing an orientation to students on the kind of instructional program (educational specifications) the building was designed to facilitate.

____17. Decision: to involve parents and other members of the community in the opening of the new facility through open houses and the like.

Evaluation Phase:

____18. Decision: to evaluate adequacy of the learning environment and safety, such as, heating and cooling, lighting, ventilation, color and texture schemes, evacuation patterns, slick floor areas, etc.

____19. Decision: to evaluate how well the architect adhered to design, reporting, and construction schedules.

____20. Decision: to begin a process of continuous evaluation based on actual usage of the building by notating those items that need to be improved in a district design specifications document that would be shared with the architect of the district's next building project.

Please complete this last section of biographical data.

I. District Setting

Number of schools:

Elementary _____ Middle or Junior High _____

High Schools _____

Number of central office administrators _____

How long has it been since you've been involved in a building program?_____

II. Business manager preparation and experience

Check only the highest degree received: Bachelor's____

Master's____ CPA____ Ed.D.____ Ph.D____

Number of years you have been a business manager:_____

Number of school business manager's positions you have held including the present one: _____

Your age on your last birthday: ____

Your sex: Female ____ Male ____

Your ethnic background: White ____ Hispanic ____

Afro-American ____ Native American ____

Thank you for completing this survey!

Please place it in the stamped envelope and mail at your earliest convenience.

A P P E N D I X B

Follow-up Letters

MISSION CONSOLIDATED INDEPENDENT SCHOOL DISTRICT
MCISD

Member, Texas Safety Association

Member, National Safety Council

JIM ROSS
Assistant Business Manager
Office (210) 580-5545

1201 Bryce Drive • Mission, Texas 78572 - 4399
(210) 580-5500 • Fax (210) 580-5523
Member Southern Association of Schools and Colleges

September 21, 1994

To the superintendent addressed:

On or about August 15, 1994, I mailed to you a scenario/questionnaire addressing decision-making roles and processes of Texas school superintendents. I have yet to receive a response.

It would be greatly appreciated if you would take a few minutes to respond to the enclosed questionnaire and drop in the mail to me (an early response is doubly welcomed). I would have included another self-addressed, stamped envelope but study costs have, in large measure, consumed the project's budget.

If I reach the minimum number of responses required to elicit meaningful statistical data, then it may be possible to add to what we know about effective superintending in this State.

Again, your time and attention is valued.

Sincerely yours,

Jim Ross

Jim Ross
Enclosures
cc. Dr. Michael Thomas
Dr. Howard Balanoff

Member, Texas Safety Association

Member, National Safety Council

JIM ROSS
Assistant Business Manager
Office (210) 580-5545

1201 Bryce Drive • Mission, Texas 78572 - 4399
(210) 580-5500 • Fax (210) 580-3523
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Sincerely yours,

Jim Ross

Jim Ross
Enclosures
cc. Dr. Michael Thomas
Dr. Howard Balanoff

Member, Texas Safety Association

Member, National Safety Council

JIM ROSS
Assistant Business Manager
Office (210) 580-5545

1201 Bryce Drive • Mission, Texas 78572
(210) 580-5500 • Fax (210) 580-5523
Member Southern Association of Schools and Colleges

October 5, 1994

To the superintendent addressed:

On or about August 15, 1994, I mailed to you a scenario/questionnaire addressing decision-making roles and processes of Texas school superintendents. Because of opening-of-school pressures, I know that it has been difficult for you to respond. Hopefully, at this point in time, you will be able to find a few minutes to complete the enclosed questionnaire and drop it in the mail (an early response is doubly welcomed).

I would have included another self-addressed, stamped envelope but study costs have, in large measure, consumed the project's budget. This is a personal project and not under the auspices of the Mission Consolidated I.S.D. The clock is running, so to speak, for this study to be completed before the end of the (UT-Austin) fall semester.

If I reach the minimum number of responses required to elicit meaningful statistical data, then it may be possible to add to the literature with respect to decision-making roles and processes of Texas public school superintendents.

Again, your time and attention is valued.

Sincerely yours,

Jim Ross

Jim Ross
Enclosures
cc. Dr. Don Rippey, Co-chairman, Dissertation Committee
Dr. Howard Balanoff, Co-chairman, Dissertation Committee
Dr. Michael Thomas, Member, Dissertation Committee

Member, Texas Safety Association

Member, National Safety Council

JIM ROSS
Assistant Business Manager
Office (210) 580-5545

1201 Bryce Drive • Mission, Texas 78572
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Jim Ross

Jim Ross
Enclosures
cc. Dr. Don Rippey, Co-chairman, Dissertation Committee
Dr. Howard Balanoff, Co-chairman, Dissertation Committee
Dr. Michael Thomas, Member, Dissertation Committee

A P P E N D I X C

Superintendent's Job Description

SUPERINTENDENT'S JOB DESCRIPTION
(Sample)

QUALIFICATIONS	The superintendent shall have at least: 1. A master's degree in educational administration from an accredited college or university. 2. Five years of experience in school administration. 3. Other qualifications deemed necessary by the board.
REPORTS TO	Board of education.
SUPERVISES	All personnel in the district.
JOB GOAL	The superintendent shall be the chief executive administrator of the district and shall be responsible for the effective execution of policies adopted by the board. The superintendent shall manage the administration of district operations and shall assign personnel responsibilities.
DUTIES	The superintendent shall:
PLANNING	1. Develop goals and objectives for the district. 2. Assist staff in development of goals. 3. Develop long- and short-range plans for district growth and improvement. 4. Conduct periodic evaluation of all programs and operations to determine improvements needed.
SCHOOL BOARD	5. Develop administrative procedures and regulations for the management of school operations. 6. Prepare board agendas and meeting materials in cooperation with the board president. 7. Attend and participate in all

meetings of the board except when personal contract is under study.

8. Keep the board continuously informed on issues, needs, and operations of the district.
9. Recommend policies on organization, finance, instructional programs, personnel, school plant, and related functions of the district.
10. Exercise discretion and judgment in matters not covered by board policy.
11. Interpret board policies to the staff and community and execute them accordingly.
12. Serve as custodian of all minutes and records of the board.

PERSONNEL

13. Recommend the number and types of positions required to provide effective staffing.
14. Promote a positive work environment and staff morale within the district.
15. Recommend personnel for hiring, make job assignments, and define the duties of all personnel.
16. Direct and supervise the staff evaluation program and make employment recommendations to the board.
17. Serve as liaison between the board and staff.
18. Recommend salary schedules for personnel.

INSTRUCTION

19. Provide for effective two-way communication channels with district personnel.
20. Keep informed regarding all aspects of the instructional program.
21. Work with the staff, board, and community in curriculum planning and recommend all curriculum guides.
22. Evaluate the effectiveness of school programs.

BUSINESS OPERATIONS

23. Assist the board in preparing the annual budget and submit

	recommendations.
	24. Ensure that funds are expended in accord with the approved budget.
	25. Direct and supervise all financial accounting and ensure that funds are managed and controlled effectively.
	26. Ensure that the school plant and facilities are properly maintained.
PUBLIC RELATIONS	27. Develop and implement a planned program for communication between the schools and community and promote community support and involvement with the schools.
	28. Represent the district in activities involving other school systems, institutions, agencies, and professional or community groups.
	29. Prepare and submit accurately and on time, any and all reports required by the board, TEA, and other federal and state agencies.
PROFESSIONAL DEVELOPMENT	30. Pursue further professional development through reading, attending conferences, and involvement with related agencies.
	31. Support staff development through in-service education and other programs of professional development.
	32. Keep informed of developments in state, federal, and local laws and public policy as related to education.
	33. Perform related duties assigned by the board.

Source: Texas Association of School Boards (1984). School board member's library. Author.

APPENDIX D

Mean Rankings of Superintendents' Skills by Importance

Mean Rankings* of Skills by Importance

*The skills are ranked according to scores given each skill by the Texas superintendents. The means given by the national sample are shown in the column labeled "Nation."

Texas	Nation	Skill Statement
1.87	1.50	Demonstrates a broad array of leadership skills.
1.88	1.80	Demonstrates sound principles of personnel administration.
2.13	2.25	Employs sound financial planning and cash flow management.
2.22	3.19	Employs principles of sound curriculum design and instructional delivery systems.
2.35	2.27	Employs effective school/community public relations, coalition building, and related activities.
2.35	2.72	Ensures that instructional time and resources are used effectively.
2.44	2.59	Develops valid and reliable performance measures for instructional outcomes.
2.48	2.31	Provides for effective evaluation of teacher performance.
2.56	2.57	Utilizes motivation techniques.
2.60	2.94	Guides facility planning, maintenance, and operations.
2.63	2.58	Demonstrates conflict mediation and the skills to accept and cope with inherent controversies.
2.64	2.56	Uses cost-effective techniques and sound program budgeting.
2.70	2.69	Guides the analysis and development of district policies.
2.73	2.87	Improves the quality of relationships among staff and students in order to enhance learning.
2.73	2.66	Utilizes collaborative goal setting and action planning.
2.74	2.77	Manages change to enhance the mastery of educational goals.
2.77	2.85	Demonstrates organizational personal planning and time management.
2.77	2.74	Utilizes effective supervision as a staff

		improvement and evaluation strategy.
2.79	2.84	Demonstrates a comprehensive understanding of the politics of school governance and operations.
2.79	2.64	Provides for effective evaluation of administrator and supervisor performances.
2.79	3.14	Uses accepted theories of cognitive development in determining the sequencing and structuring of curricula.
2.80	2.87	Applies legal concepts, regulations, and codes essential for effective school operations.
2.80	2.73	Demonstrates interpersonal communication skills.
2.87	2.93	Effectively addresses pupil personnel and categorical program needs.
2.94	2.89	Employs evaluation and planning models and methods.
2.95	3.19	Uses instructional and motivational psychology.
2.97	2.60	Utilizes an array of human relations skills.
3.14	3.30	Selects, administers, and interprets evaluation instruments.
3.15	3.13	Employs organizational development practices.
3.16	3.17	Develops effective strategies for passing bonds, taxes, and referenda.
3.19	3.01	Communicates and projects an articulate position for education.
3.19	3.14	Assesses staff needs to identify areas for concentrated staff development.
3.20	3.22	Employs climate assessment methods and skills.
3.21	3.15	Identifies system needs for resource allocation of new personnel.
3.23	3.25	Utilizes research designs and methods including gathering, analyzing, and interpreting data.
3.26	3.19	Utilizes analytical techniques of management.
3.27	3.58	Demonstrates a sound understanding of human relations, organizational development, and leadership skills.
3.28	3.44	Uses alternative methods of monitoring and evaluating student achievement.

3.34	3.52	Plans and employs futures methods to anticipate occupational trends and their implications.
3.37	3.37	Demonstrates multicultural and ethnic understanding.
3.38	3.42	Analyzes taxonomies of instructional objectives and validation procedures for curricular units and sequences.
3.40	3.29	Uses mass media in shaping and forming opinions.
3.42	3.56	Assesses individual and institutional sources of stress and develops methods for coping with stress.
3.47	3.36	Utilizes alternative staffing patterns where appropriate.
3.49	3.40	Provides for effective evaluation of classified (non-certified) staff members.
3.54	3.79	Uses computers and other technologies as instructional aids.
3.70	3.78	Applies computer management to the instructional program.
3.81	3.25	Utilizes lobbying, political power, and/or influence.
4.05	4.09	Uses descriptive and inferential statistics appropriately.
4.20	3.51	Utilizes negotiation and/or collective bargaining processes.
4.47	4.44	Promotes and makes use of the arts and cultural resources.

Source: Collier, V. (1987). Identification of skills perceived by Texas school superintendents as necessary for successful job performance. Unpublished doctoral dissertation. The University of Texas at Austin.

A P P E N D I X E

Mean Rankings of Superintendents' Perceived Needs

		understanding of the politics of school governance and operations.
3.44	3.58	Utilizes an array of human relations skills.
3.47	3.57	Uses cost-effective techniques and sound program budgeting.
3.49	3.49	Uses instructional and motivational psychology.
3.51	3.57	Uses mass media in shaping and forming opinions.
3.52	3.59	Analyzes taxonomies of instructional objectives and validation procedures for curricular units and sequences.
3.53	3.33	Improves the quality of relationships among staff and students in order to enhance learning.
3.53	3.49	Assesses staff needs to identify areas for concentrated staff development.
3.55	3.03	Utilizes analytical techniques of management.
3.56	3.56	Applies legal concepts, regulations, and codes essential for effective school operations.
3.57	3.65	Uses computers and other technologies as instructional aids.
3.58	3.08	Utilizes research designs and methods including gathering, analyzing, and interpreting data.
3.59	3.58	Demonstrates interpersonal communication skills.
3.60	3.32	Ensures that instructional time and resources are used effectively.
3.60	3.44	Demonstrates a sound understanding of human relations, organizational development, and leadership skills.
3.61	3.51	Uses alternative methods of monitoring and evaluating student achievement.
3.63	3.56	Effectively addresses pupil personnel and categorical program needs.
3.63	3.42	Employs organizational development practices.
3.65	3.62	Plans and employs futures methods to anticipate occupational trends and their implications.
3.66	3.75	Selects, administers,and interprets evaluation instruments.
3.68	3.59	Develops effective strategies for passing

		bonds, taxes, and referenda.
3.69	3.64	Communicates and projects an articulate position for education.
3.69	3.62	Applies computer management to the instructional program.
3.70	3.35	Employs climate assessment methods and skills.
3.70	3.43	Guides facility planning, maintenance, and operations.
3.72	3.56	Guides the analysis and development of district policies.
3.74	3.51	Assesses individual and institutional sources of stress and develops methods for coping with stress.
3.74	3.59	Utilizes lobbying, political power, and/or influence.
3.77	3.83	Identifies system needs for resource allocation of new personnel.
3.78	3.55	Utilizes participative management where appropriate.
3.79	3.84	Uses descriptive and inferential statistics appropriately.
3.79	3.64	Utilizes alternative staffing patterns where appropriate.
3.84	3.92	Promotes and makes use of the arts and cultural resources.
3.86	3.73	Provides for effective evaluation of classified (non-certified) staff members.
3.87	3.38	Utilizes negotiation and/or collective bargaining processes.
3.92	3.71	Demonstrates multicultural and ethnic understanding.

Source: Collier, V. (1987). Identification of skills perceived by Texas school superintendents as necessary for successful job performance. Unpublished doctoral dissertation. The University of Texas at Austin.

R E F E R E N C E S

Association of School Business Officials of the United States and Canada. (1980). Schoolhouse planning. Park Ridge, Illinois: Author.

Baker, G. A. (1980). On deciding how to decide. Austin, Texas: Author.

Baker, G. A., Roueche, J. E., & Gilliett-Karam, R. (1990). Teaching as leading. Washington, DC: The Community College Press.

Bass, B. M. (1985). Leadership and performance beyond expectations. New York: The Free Press.

Bennis, W., & Nanus, B. (1985). Leaders. New York: Harper & Row.

Blake, R. R., & Mouton, J. S. (1964). The managerial grid. Houston: Gulf Publishing Company.

Blumberg, A. (1985). The school superintendent. New York: Teachers College Press.

Britton, P. R., & Stallings, J. W. (1986). Leadership is empowering people. Lanham, Maryland: University Press of America.

Brubacher, J. S. (1947). A history of the problems of education. New York: McGraw-Hill.

Buck, J. (1989). Transformational leadership behaviors of exemplary Texas superintendents. Unpublished doctoral dissertation. The University of Texas at Austin.

Burns, J. M. (1978). Leadership. New York: Harper & Row.

Campbell, R. F., Cunningham, L. L., Nystrand, R. O., & Usdan, M. D. (1985). The organization and control of American schools. Columbus, Ohio: Merrill Publishing Company.

Candoli, I. C., Hack, W. G., Ray, J. R., & Stollar, D. H. (1973). School business administration. Boston: Allyn and Bacon.

Chadwick, B. A., Bahr, H. M., & Albrecht, S. L. (1984). Social science research methods. Englewood Cliff. New Jersey: Prentice-Hall.

Clabaugh, R. E. (1966). School superintendent's guide. West Nyack, New York: Parker Publishing Company.

Collier, V. (1987). Identification of skills perceived by Texas school superintendents as necessary for successful job performance. Unpublished doctoral dissertation. The University of Texas at Austin.

Council of Educational Facility Planners, International. (1976). Guide for educational facilities. Columbus, Ohio: Author.

Dale, E. (1973). Management: Theory and practice. New York: McGraw-Hill.

Daniel, T. L. (1990). Identifying critical leadership competencies of manufacturing supervisors in a major electronics corporation. Unpublished doctoral dissertation. The University of Texas at Austin.

Davidson, J. L. (1987). The superintendency--leadership for effective schools. Jackson, Mississippi: The Kelwynn Press.

Davis, J., & Loveless, E. E. (1981). The administrator and educational facilities. Washington, DC: University Press of America.

Day, C. W. (1985). Who affects costs of constructing school facilities? Council of Educational Facility Planners' Journal, 23,(6), 9-10.

Drucker, P. (1967). The effective executive. New York: Harper and Row.

Flanagan, J. (1954). The critical incident technique. Psychological Bulletin, 51(4), 327-358.

Fredrickson, J. W. (1984). The comprehensiveness of strategic decision processes: Extension, observations, future directions. Academy of Management Journal, 27,(3), 445-466.

Fromkin, H. L., & Streufert, S. (1976). Laboratory experimentation. In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology (415-465). Chicago: Rand McNally.

Groves, R. (1985). The architect and school administrator relationship during construction of school facilities: Contract administration. Council of Educational Planners' Journal, 23(2), 4-6.

Griffiths, D. (1966). The school superintendent. New York: Center for Applied Research in Education.

Guthrie, J. W., & Reed, R. J. (1986). Educational administration and policy. Englewood Cliffs, New Jersey: Prentice-Hall.

Halpin, A. W. (Ed.). (1958). Administrative theory in education. Chicago: Midwest Administrative Center, University of Chicago.

Hedley, R. L., & Brokaw, J. C. (1984). Facility planner and architect as the planning and design team: Problems and issues. Council of Educational Facility Planners' Journal, 22(6), 4-7.

Herzberg, F. (1976). The managerial choice. Homewood, Illinois: Dow Jones-Irwin.

Herzberg, F. (1959). The motivation to work. New York: Chapman & Hall, Limited.

Herzberg, F. (1966). Work and the nature of man. Cleveland: World Publishing Company.

Hitt, W. D. (1988). The leader-manager. Columbus, Ohio: Battelle Press.

Holcomb, J. (1988). A guide to the planning of educational facilities. Stephenville, Texas: Author.

House, R., & Mitchell, T. (1974). Path-goal theory of leadership. Contemporary Business, 3(Fall), 81-98.

Hultgren, S. (1985). Why schools choose construction managers. Council of Educational Facility Planners' Journal, 23(6), 7-9.

Kidder, L. H., & Judd, C. M. (1986). Research methods in social relations. New York: Holt, Rinehart, and Winston.

Kimbrough, R. B., & Nunnery, M. Y. (1988). Educational administration. New York: Macmillan.

Kinder, J. A. (1978). Decision making in public education. Austin, Texas: MESA Publications.

Knirk, F. G. (1979). Designing productive learning environments. Englewood Cliffs, New Jersey: Educational Technology Publications.

Koontz, H., & O'Donnell, C. (1972). Principles of management: An analysis of managerial functions. New York: McGraw-Hill.

Kotter, J. P. (1988). The leadership factor. New York: The Free Press.

Kowalski, T. J. (1983). Solving educational facility problems. Muncie, Indiana: Accelerated Development Incorporated.

Kowalski, T. J. (1989). Planning and managing school facilities. New York: Praeger.

Lewis, J. (1987). Re-creating our schools for the 21st century. Westbury, New York: J. L. Wilkerson Publishing Company.

Mink, O., Mink, B., & Owen, K. (1987). Groups at work. Englewood Cliffs, New Jersey: Educational Technology Publications.

Mintzberg, H. (1973). The nature of managerial work. New York: Harper and Row.

Mintzberg, H. (1979). The structuring of organizations. Englewood Cliffs, New Jersey: Prentice-Hall.

Mintzberg, H. (1983). Structure in fives: Designing effective organizations. Englewood Cliffs, New Jersey: Prentice-Hall.

Orr, D. R. (1990). An expectancy theory investigation of school superintendent job performance. Unpublished doctoral dissertation. The University of Texas at Austin.

Ouchi, W. G. (1981). Theory Z. Reading, Massachusetts: Addison-Wesley.

Pashiardis, P. A. (1990). Effects of decision motive and organizational performance level on strategic decision processes of school superintendents and community college presidents in Texas. Unpublished doctoral dissertation. The University of Texas at Austin.

Pena, E. E. (1990). Presidential perceptions of teaching excellence of award-winning faculty members in American and Canadian community colleges. Unpublished doctoral dissertation. The University of Texas at Austin.

Pringle, P. (1989). Relationship of general administrative leadership skills to superintendent selection and contract renewal. Unpublished doctoral dissertation. The University of Texas at Austin.

Rebore, R. W. (1985). Educational administration: a management approach. Englewood Cliffs, New Jersey: Prentice-Hall.

Roscoe, J.T. (1975). Fundamental research statistics for the behavioral sciences. New York: Holt, Rhinehart, and Winston.

Roueche, J. E., Baker, G. A. , & Rose, R. R. (1989). Shared vision. Washington, DC: The Community College Press.

Samples, J. (1983). The Vroom and Yetton normative leadership model applied to public school case examples. (ERIC Document Reproduction Service No. ED 229871).

Schmuck, R. A., & Runkel, P. J. (1985). The handbook of of organization development in schools. Palo Alto, California: Mayfield Publishing Company.

Sciafani, S. (1987). AASA guidelines for preparation of school administrators: Do they represent the actual job behaviors of superintendents. Unpublished doctoral dissertation. The University of Texas at Austin.

Shafritz, J. M., & Hyde, A. C. (1992). Classics of public administration. Pacific Grove, California: Brooks/Cole Publishing Company.

Simon, H. A. (1976). Administrative Behavior. New York: The Free Press.

Simon, H. A. (1960). The new science of management decision. New York: Harper and Row.

Stogdill, R. M. (1974). Handbook of leadership. New York: The Free Press.

Stoops, E., Rafferty, M., & Johnson, R. E. (1981). Handbook of educational administration. Boston: Allyn and Bacon.

SYSTAT, (1992). SYSTAT: Getting started, version 5.2. Evanston, Illinois: SYSTAT, Incorporated.

Texas Association of School Boards. (1984). School board member's library. Austin, Texas: Author.

Texas Education Agency. (1989). Texas school directory. Austin, Texas: Author.

Texas Education Agency. (1988). Texas school law bulletin. Austin, Texas: Author.

Texas Education Agency. (1989). Texas school law bulletin, (Suppl.). Austin, Texas: Author.

Tichy, N. M., & Devanna, M. A. (1990). The transformational leader. New York: John Wiley & Sons.

Tyack, D., and Cummings, R. (1977). Leadership in American public schools before 1954: Historical configurations and conjectures. In L. Cunningham, W. Hack, and R. Nystrand (Eds.), Educational Administration: The Developing Decades. (pp. 46-66). Berkeley, California: McCutchan.

Vroom, V. H. & Jago, A. G. (1988). The new leadership: Managing participation in organizations. Englewood Cliffs, New Jersey: Prentice-Hall.

Vroom, V. H., & Yetton, P. W. (1973). Leadership and decision-making. Pittsburgh, Pennsylvania: University of Pittsburgh Press.

Vroom, V. H. (1973). A new look at managerial decision making. Organizational Dynamics, 3(4), 66-80.

Vroom, V. H. (1974). Decision making and the leadership process. Journal of Contemporary Business, 3(4), 47-64.

Vroom, V. H. (1976). Can leaders learn to lead? Organizational Dynamics, 4(3), 17-28.

Vroom, V. H., and Jago, A. G. (1974). Decision making as a social process: Normative and descriptive models of leader behavior. Decision Sciences, 5(4), 743-769.

Wiles, J., and Bondi, J. (1985). The school board primer: A guide for school board members. Boston: Allyn and Bacon.

Yukl, G. A. (1989). Leadership in organizations. Englewood Cliffs, New Jersey: Prentice-Hall.

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James Moffatt Ross was born in Columbus, Texas, on December 20, 1948, the son of Mabel Lena Ross and Leo Fletcher Ross. After completing his work at Edcouch-Elsa High School, Edcouch, Texas, in 1967, he entered Pan American University in Edinburg, Texas. He received the degree of Bachelor of Arts from Pan American University in 1976. During the following years he was employed as a English language arts teacher and department chair at Mission Junior High School, Mission, Texas. In 1984 he received the Master of Education degree from Pan American University. He entered the Graduate School of The University of Texas in June of 1988. In 1990 he was appointed assistant business manager of the Mission Consolidated Independent School District.

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